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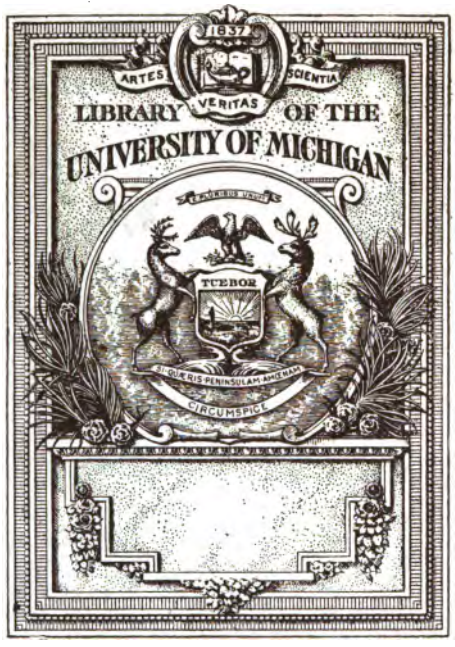
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THE

# BRITISH FLORIST;

OR

## LADY'S JOURNAL OF HORTICULTURE.

ILLUSTRATED BY A

SELECTION OF THE MOST ELEGANT FLOWERING PLANTS

NOW CULTIVATED IN THE ENGLISH GARDEN AND GREENHOUSE.

IN SIX VOLUMES.

WITH EIGHTY-ONE CAREFULLY COLOURED PLATES.

VOL. III.

LONDON:
HENRY G. BOHN, YORK STREET, COVENT GARDEN.
1846.



# PREFACE.

It is with mingled feelings of gratification and pride that we find ourselves at the close of another twelvemonth's labours, a period which has in no small degree contributed to establish the former success and utility of the Florist's Journal, and eminently encouraging us to commence a new year with increased vigour.

A period of much interest to the horticulturist has just passed over, a very great number of new plants, both exotic and improved hybrids, having been added to our collections; the finest of these have been noticed in our pages, as also the several improvements in the culture of individual plants, and the more extended subject of general management: it has been seen that the march of improvement in these respects has been rapid, requiring exertions of no ordinary character to keep pace with it, and to lay before our readers novelties at once useful and interesting

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at the earliest date; such, we trust successfully, has been our aim, and such will it be henceforth.

To dwell on the pleasures derivable from the study and culture of flowers is at the present day quite superfluous, as the yearly accession of pleasing novelties to our gardens, together with the improved means of rearing and enjoying while in perfection such immense varieties of beautiful flowers, denote the vast interest that Horticulture and its junior sister, Floriculture, have excited; it is in this struggle to perfection that we feel the deepest interest, our warmest wishes and most zealous exertions being unreservedly devoted to the advancement of these most delightful arts.

We cannot lay aside our pen without thanking our numerous contributors for their kind exertions, and trust they will still favour us with their valuable aid.

*Dec.* 1*st*, 1842.



EPIPHYLLUM MAKOYII.

London Published by How & Parsons 132, Fleet Street, Jan.y 1, 1842.

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THE

# FLORIST'S JOURNAL.

JANUARY 1, 1842.

## CACTEÆ AND THEIR CULTIVATION.

### EPIPHYLLUM MACOYII.

(WITH A PLATE.)

THE Cacteæ are a very numerous and highly interesting tribe of plants, which ought, perhaps, to be all included in a single genus, divided into sections; but they are so numerous, and so varied in their forms, that they are handier in the system, divided into numerous genera. It should seem, however, that these genera are merely nominal, and hybridize with each other; for the one which we have figured is a hybrid between *Epiphyllum Ackermannii* and *Cereus speciosissimus*. As the portrait shows, it is a very fine flower, of the shape and size of the Epiphyllum, and of the same colour as the Cereus. Mr. Low, of Clapton, from whom we received the specimen, recommends that it should be grown in a mixture of sandy loam, decomposed vegetable matter, and a little sand; that it should receive no water during the winter, but a rather copious supply in the flowering time. It is added, that the variety is named after Mr. M'Coy, of Liege.

All the Cacteæ require nearly the same treatment as the one mentioned, for they all grow in situations pretty similar to each other, and the differences between them are the trivial ones of shape, size, and colour. With the exception of one or two which are met with in the dry countries of south-eastern Europe and the adjacent parts, they are all natives of Central and South America, and the adjoining islands. They prefer the most dry and apparently sterile situations on the slopes of the hills, or among or on the rocks, where not a drop of water ever stagnates. During the

dry period of the year, which occupies by much the greater part of it, they remain perfectly inert, some retaining their plumpness apparently by absorption through the epidermis, while others, especially the creeping ones, become flaccid, and can be twisted about like cords, without sustaining the smallest injury. During this season they show but few of the ordinary characters of vegetation. They are merely pieces of matter, the vegetable quality and life of which are inferred from the texture of the surface. This surface is usually glossy, of various shades of green, sometimes with more or less of red or brown, and covered with spines or prickles, which are usually collected into tufts, like those of a gooseberry-bush. In their nature, indeed, they have a closer analogy to the gooseberry plant than to any other vegetable; and the fruit, and even the general substance, tastes of gooseberries. In habit, however, they are very different; for they have no distinct difference of petal, wood, and bark, and none of leaf or stem. Hence the name of Epiphyllum is an incorrect one, as it implies that the flowers grow upon the leaves, whereas there are no leaves for them to grow on, the permanent substance of the plant, whatever may be its form, being always a mass of matter which may be called a frond or a sort of stem, but never a leaf. If any part of any one of the tribe is to be considered as a leaf, it is the small bracts which are on the lower parts of the flowers; and, therefore, they grow upon the flowers, and not the flowers upon them.

In all the Cacteæ, so far as is known, the principle of vegetable life is more vigorous and more generally diffused, as well as more indestructible, than in almost any other tribe of plants. A very small portion of a frond, on exposition, will root, grow, and become a perfect plant. A piece cut out of the side will do this as well as one cut off the end; and if cut from the end, it signifies not which end of the cutting is made the root. It sometimes happens that, by incautious watering during the dry season, and especially by allowing water to stagnate about the roots at that time, the roots and lower parts of the fronds are completely rotted off, without the smallest injury to the upper parts. In such cases, these parts have sometimes been thrown upon a dry shelf, as useless lumber, left there in a state of perfect inactivity for more than twelve months, and after this, by trimming off the rotted parts, and planting the remainder, they have immediately begun to root, and very soon produced fine flowers.

This capacity of remaining inactive for long periods of time, and then being easily restored to growth and flowering, accords well with the natural situation of the plants, and is also of much service in their artificial culture. Upon the dry and sterile places in which they most abound, the rains are not only inconstant in their seasons, but adverse currents of the atmosphere and other circumstances may deprive them of rain for a whole year, or even longer. When this is the case, the Cacteæ do not die, but merely remain inactive till the rain comes, and when that does come, they very speedily start into growth, and soon produce flowers. The point has not been fully ascertained, at least to the extent which is desirable, but the probability is, that the growth and flowering are more energetic in proportion as the plants have been longer in a state of inactivity; and thus it is likely that the rare flowering of species such as the night-flowering Cereuses, is owing to keeping them in a state of partial activity, either by watering them when they are in a state of repose, or from the moistness of the air occasioned by the watering of other plants mixed with them in the green-house or dry-stove. In the proper management of such a stove, the Cacteæ, of whatever species they may be, should be kept as far apart as possible from such plants as require frequent watering all the year round; because their rest is disturbed by the vapour thence resulting, and consequently their awakening into growth and flowering is less vigorous. During this time the green-house, or other place in which the plants are grown, should be kept as dry as possible, both in the moisture in which the plants are potted, and in the air by which they are surrounded. While they are thus in a very dry state, they are subject to little injury from variations of temperature, unless the degree of cold is very near that of freezing, and this they will not bear. Therefore they must be kept in houses, to protect them from showers and from the moisture of the atmosphere, as well as from this dangerous degree of cold; but still rather a low temperature during the time of rest is most favourable to their vigour when they come into action. When this takes place, the temperature should be raised, and water supplied, so as completely to drench the plants, but by no means to stagnate about them; and if those different modes of treatment are properly timed, there seems every reason to believe that all the species could be brought into flowering every year; and as many of the flowers are exceedingly beautiful, and all of

them peculiar, the proper treatment of them would contribute greatly to the richness of collections of flowering plants; and for this reason they are eminently worthy of the attention of every cultivator.

There is another circumstance which ought to enhance the interest and value of these plants with the cultivator: numerous and varied as they are, we have hinted that the whole belong to a single natural genus; and this being the case, the whole of them might be hybridized with each other, and varieties without end be produced, in which the better qualities of both plants might be blended. Indeed we know of scarce any other tribe of plants, excepting, perhaps, the Orchideæ, which are also probably all one genus, or at most two genera,—those that root in the earth, and those which adhere to trees, and are air plants,—that admit of more extensive hybridization, and consequently can so readily produce a number of new varieties, as the Cacteæ. The hybridization of the Orchideæ is comparatively a new operation, but we know of one eminent grower of these plants that at present has them impregnated and coming into seed by the most diversified and unlikely crosses; and we trust we shall, ere very long, have to record some curious instances of hybrid seedlings, quite different from any of the plants now in the stoves.

We shall have occasion to revert to the Cacteæ, as well as to these Orchideæ, and therefore we shall only further mention that the Cacteæ are admirably adapted for house or window plants, as well for their singular appearance and beauty, as for the ease with which they can be cultivated, and the little attention which they require.

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## ADVANTAGES OF HEATING THE OPEN AIR.

[We have abridged the following communication, because in the form in which it was sent to us it mixed up subjects which have no necessary connexion with each other. The part which we have omitted contained pretty severe strictures—whether well-founded or not, we cannot say—upon the conduct of a horticultural functionary who is much employed in selecting gardeners for people

of property, especially the wealthy Jews. If what is alleged by our correspondent be true, it cannot fail in being injurious to gardening as it is unjust to gardeners; but we would require to have the allegations well certified before inserting them in our pages. The remaining part of the letter we give, as it contains only a speculation, and one not unworthy of being considered.]

TO THE EDITOR OF THE FLORIST'S JOURNAL.

SIR,—My attention has been often called to the fact, that though the productions of all climates are cultivated in modern Europe, yet there is no one place, even in a national garden, where an attempt has been made to arrange and grow them in a state resembling that of nature. It is true that the climate of Britain is not so well adapted for the growth of exotics, as that of the south and even the central parts of Europe; because, though the temperature is milder during winter than in some of those countries, yet it is more injurious to tender vegetation.

It has been observed, that many plants are destroyed, or seriously injured, by a less degree of cold in Britain than is necessary for producing the same effect in other countries. Roses in France may be quoted as an instance in which tender plants bear a lower temperature in that country than they do in Britain; and the cause, though but little attended to, is eminently worthy of the attention of all florists, for our more delicate open air plants are destroyed upon nearly the same principle as the French roses, and the infertility of both is owing to the same cause, though modified a little by the different habits of the several genera. In America we have still more remarkable instances of this endurance of cold, and we can trace it to the same cause, namely, the dryness of the atmosphere. In France, and especially in America, the rains upon the low grounds, and the snow upon the cold and elevated, fall more heavily than they do in Britain; but they are sooner exhausted, and in the intervals the air is much more dry.

Now it is this superior dryness of the air which preserves plants until the temperature is considerably lower than that at which they begin to be destroyed in Britain. This arises from the moisture of the air in the latter country being always nearer the point of saturation, and thus a moderate depression of temperature occasions a deposit of water in the form of dew, or simply as

a moistening of the surface. The action of heat which is given out during the condensation of the atmospheric vapour into this moisture, is not absorbed by the humid earth and plants, but dissipated through the atmosphere; and thus, when the sun and warmth return, it increases the evaporation, and cold and constriction of the more delicate vessels of plants, by which that operation is always accompanied. This is verified by a fact, to which you, your correspondents, or both, have adverted in former numbers of your journal, namely, that plants are affected more readily by frost in low and moist situations than in those which are more dry, warm, and cold; and this is, also, the reason why flowers grow better, and bloom more finely, where the soil is porous, having an under drainage, and, consequently, a more dry surface.

This brings me to the main subject of this communication, though by a path rather circuitous. What I would urge is, the obtaining of such an atmosphere out of doors, as would suit those plants which are hardy at every temperature above freezing, and for several more degrees below freezing in more dry atmospheres than with us. Were this once obtained, our out-door floriculture, which is by far the most desirable, as being ornamental to extensive scenes, might be greatly improved, by increasing the number of plants, and lengthening the season of their out-door flowering. In houses, whether these come under the denomination of greenhouses, conservatories, dry stoves or moist stoves, plants of all climates may, if properly treated, be preserved in good health, made to flower well, and be neat and handsome enough as individuals; but there are no means by which the plants can be grouped according to nature, and an idea of their habitat communicated. For this there is not, generally speaking, sufficient room; and even a moderate share of the room necessary for the display of tropical vegetation could not be obtained without great expense, and however expensive, it would be too circumscribed for the taller plants, and too subject to fluctuations of temperature for those of humbler growth. If, for instance, a stove were large enough for giving full expansion to the giants of the tropical forests, it would convey away too rapidly that heat and moisture which are necessary for plants of less stately growth; because if the air were sufficiently hot for the taller ones, the ascending current would either dry up those on the surface, or chill them by evaporation.

What is necessary is, a production of heat, in the air itself, throughout all heights of the vegetation; and the production of this is the problem to be solved,—a problem which is either possible, or not possible, although a good deal of management would be required. I can see no impossible element in it.

In a future communication, I may, perhaps, if this should find favour in your estimation, and that of your readers, point out my notion of the finest effect which could be given to this out-door heating, but in the mean time I confine myself to the simple problem of its practicability. From what I have observed and heard, I am inclined to think that Mr. Weeks, junior, of Gloucester Place, King's Road, Chelsea, is the horticultural artist, in whose hands the project would be most likely to succeed; and the *modus operandi* would be that combination of hot-water tubes, and pipes for heated air, which answers so well for keeping up the temperature of frames in winter, and for the ripening of cucumbers and other productions that grow near the surface. Any requisite degree of temperature may be given to the hot water which circulates in the tubes, and they may be raised to the required height; and if the air pipes open by trumpet-mouths below, and smaller apertures above, being water-tight both at the entrance and at the exit, the air within the tubes might, according to their lengths, be raised to the degree of heat required, which in the case of plants merely hardy would not require to be much above the freezing point. The heat radiating from the hot-water tubes, and the directly heated air, would both contribute to dry the atmosphere, and by this means adapt it for the intended purpose.

In this there appears to be no difficulty, as it is merely turning upon edges that same apparatus which lies flat when applied to the heating of a pit or frame. To this heating with water and air, various additions might be made, which would contribute to its general effect. For instance, the grounds might be sheltered from the chilling winds, by copses of planting, and the throwing up of embankments, or slopes, facing that direction in which the rays are hottest. Canopies might be erected over tropical plants, to protect them from the cold, and to confine the heat when radiated from the earth during the coldest time of the night; and by a judicious blending of these contrivances with others which would readily suggest themselves to an ingenious artist, the temperature of the air might be kept above the freezing point,

even in very cold weather, and the removal of half-tender plants into frames might be rendered quite unnecessary.

For plants of high tropical character, and especially for those requiring to be constantly in a stove, this out-door heating will not, of course, answer; but it would suit well for many plants, and especially for those which, during their season of rest, require a dry atmosphere, with not too high a temperature. Plants of this description are very numerous, and some of them highly beautiful; so that if the scheme were successfully introduced, it would be one of the most pleasing improvements ever effected in floral landscapes. Before, however, I enter more at large upon the subject, I would solicit the advice both of the artist and the cultivator, as they are equally necessary to the proper effect of what I have suggested.

A YOUNG FLORIST.

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## ON EARLY ANNUALS.

BY MR. A. SHEARER.

IT occurred to me, while repotting some Mignionette, *Nemophila insigna*, and *Schizanthus pinnata*, for specimen plants to ornament the conservatory and greenhouse, early in spring, that some of your readers might not be aware of the splendour and beauty the above mentioned annuals can be brought to by a little attention. Mignionette, for its gracefulness and beauty, and the sweet odour it sends forth from the pasture, is rendered attractive, even to the rudest of Flora's admirers; but more so while in the bouquet of the lady, as she holds it in her hand in mimic gracefulness, through the intricate mazes of the quadrille, or smells it in preference to all the perfumes that wealth and art can invent. It has been, and will be, a favourite among the ladies. The following is the treatment I have adopted, and with success.

I make three sowings: the first in the second week of August, the second about the end, and the third in the second week of September; those for specimen plants I sow in pots of the size called 48, and those for remaining as they are in 32. The soil I use is half peat and half leaf mould, well incorporated together,

and passed through a very coarse sieve. The parts of the peat that remain in the sieve I lay above the potsherds, to secure proper drainage. I sow the seed moderately thin, and cover it slightly with soil composed of sand and peat passed through a fine sieve. I then water the pots and put them in a frame, and keep it nearly close shut up till the seed vegetates; and then the lights are pulled off in fine weather, to prevent the plants being drawn up weak; but I put them on in heavy rains. I thin them out as soon as I can take hold of them with ease; I thin them twice, leaving at the last four plants in the 48 size, and six in the 32. If the weather is fine, I let them remain till the middle of October; if otherwise, I remove them to a shelf close to the glass in the greenhouse, where they get plenty of air; and in a short time they are in flower. Those of the second sowing I prefer for specimen plants. When the pots are well filled with roots, so that they are protruding through the bottom of the pots, I shift them into a size larger; those in 48's I shift into 32's, and those in the latter flower much longer and finer by being shifted into 24's. I use the same soil, but not sifted; then tie up the plants to small stakes. At the time they require shifting, the leading shoot will be in flower, which I pinch off those plants. About the beginning of January they will require another shift into No. 24's; at this shift I add a third of light rich loam to the former compost, and take in the strongest lateral shoot for a leader; at this period the laterals will be flowering, which I pinch off; they will now begin to grow rapidly, and proper attention should be paid to watering. By adopting the above treatment I had plants three feet high, and two feet in diameter, which kept on flowering till the middle of May; and I am confident had they been shifted again they would have grown larger. Many who saw them thought it was some new sort. To those who grow it for cut flowers it would be of great advantage to shift it into a larger pot than the one the seed is sown in, because when the leading shoot was cut, the side-shoot would grow much stronger, and continue longer in flower.

I come now to the second mentioned, the *Nemophila insigna*, the colour of which we have so little of in Flora, viz. blue, particularly in the spring, when the greenhouse is ornamented with the white and variegated Camellia, the white, red, and yellow Azaleas, the yellow Acacias, the forced Rhododendrons of sorts, and many others of those colours which characterise that season.

(True, we have the *Hovia Celsi*, and a solitary Hyacinth.) Therefore the *Nemophila* renders itself a twofold acquisition, in its colour and its easy culture. I sow the seed of it and the *Schizanthus* at the same time as the Mignionette, viz. the beginning of August, under hand-glasses, removing the glasses as soon as the plants are above the surface. I thin them out to prevent their being drawn up weak. When the plants are a good size, I pot them into 60's, one in a pot, if strong, but sometimes three; and I give them a good watering over head, and place them in any sheltered situation, but fully exposed to the sun. About the middle of October, I take the strongest, and repot them into 48's, and tie up the branches to five or more sticks in each pot; I then place them in a cold pit, giving them all the air that is possible. About the beginning of December some will require to be shifted into 32's, to be in flower in February, and the others I shift in succession into 24's. When I shift them into the pots I intend them to flower in, I stick in four willows at regular distances round the pot, and, bending the two opposite, I bring them together at top in the form of a balloon; those in 32-pots about two feet and a half above the pot, and those in 24's three feet. I then put hoops of strong wire round the willows, the first six inches above the pit, the other eighteen inches above it, securing them firm to the willows. I then tie fine threads of matting at regular distances between the two hoops, to train the shoot to which, when they reach the top, I allow them to hang down on the other side. The reason why I train them in the manner described is this:—if trained on straight sticks, as soon as they get to the top they break down, not being able to support themselves, and thus leave all the top part without any flowers. Another way, is not to tie them up at all, but let them hang down all over the pot. In doing them this way I keep them on shelves, to prevent their damping off. In placing them in the greenhouse, the pot should be placed above the height of the visitor, it being unsightly, not having many flowers near the roots. Also stakes can be driven into the border of the conservatory, and pots placed on the top, the shoots hanging down and covering the stake. The plant has in this manner a fine effect; in a word, it has only to be seen to be admired.

I come now to the last mentioned, *Schizanthus*, which I treat in the same manner as the *Nemophila*, except the training; it

requires only one stick in the centre. Last spring I had them five feet high, growing in pots the size called 16's, and branched to the top of the pot, forming a beautiful pyramid. I use the same soil for both that I use for the Mignionette.

In conclusion, I can only add, that if any of your readers have not seen the above cultivated in pots for flowering in spring, they should lose no time in growing them, not doubting but they will be amply repaid for their attention. As many will have the *Nemophila* and *Schizanthus* in store pots for planting out in March, in the flower garden, they have only to select a few of the strongest, and repot them; they will have good plants in a short time.

A. SHEARER.

*Putney Hill.*

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## ON THE GENUS IPOMEA.

BY MR. R. PLANT, OF PADHOLME NURSERY, PETERBOROUGH.

THIS genus, containing as it does some of the most splendid of our exotic climbers, appears particularly deserving a notice in the Florist's Journal, several of the species possessing claims of no mean order, not only for their extreme beauty, but also for their usefulness, as being appropriate ornaments not only of the stove, but also the greenhouse, however small, and even the open air, if supplied with proper soil and a good situation. A brief notice of some of the most prominent species may not prove uninteresting, in doing which I will mention the best modes of treatment I am acquainted with, though the cultivator must bear in mind, when reading a treatise on any particular plant, that such treatise is only the method of the person who writes, and if the reader can improve on or alter it to suit his own convenience, provided the plant is not the worse for such alteration, to him a great share of credit belongs.

*T. Horsfallii* is certainly one of the most magnificent climbers we possess; for this, a stove is indispensable, indeed the roof of a house devoted to Orchidaceæ seems its most natural place, and in

this situation I have seen it one of the most beautiful objects easily conceived. It requires a rich loam of an open texture, and to be planted in the border of the house. The earth about the roots of plants so placed, should be renewed every season with loam and well-rotted manure, perfectly incorporated. The plant should be allowed to have a good rest in the early spring months, at which time it should be pruned back pretty close. It will begin to push new shoots in April; these must be carefully tied in their respective places, or by pushing against the glass they are frequently broken; all superfluous shoots should be removed; in short, the knife should be freely used during the whole of the growing season. By the end of June it will begin to produce its rich dark crimson blossoms, when it must be shaded from the sun, or the flowers lose their brilliancy, and their duration is materially shortened: it is propagated, though with some difficulty, by cuttings. The easiest mode is by grafting on stocks of *I. insignis*. To increase it by cuttings, choose young wood, pretty firm at the base; take them off when about three inches long, square the bottom end, without shortening or cutting more of the leaves off than can be avoided; pot them in fine silver-sand, and cover them with a bell or hand-glass; this must be wiped every day: they require a brisk bottom heat. The method of grafting is a curious operation; it is done by cutting off a strong root of *Ipomea insignis*, and a growing shoot of the plant under consideration, and joining them together with a *cleft-graft;* this must be done neatly; plunge them in brisk bottom heat, cover them with a hand-light, and keep them constantly shaded. They require, with the same attention as for cuttings, about a month to unite, when they may be hardened off, and subjected to the same treatment as for mature plants.

*I. insignis* is of very easy culture, and admirably suited for a greenhouse climber. It is of very rapid growth, and bears a profusion of large deep lilac flowers. It requires a good bed of rich loam, which must be drained with a stratum of coarse gravel or scoriæ. This requires all the sun it can get. It may be readily increased from cuttings taken off at a joint, and planted (without shortening) in a mixture of peat and sand in equal parts, to be covered with a small bell-glass, the size of the pot, and plunged in a bark bed. These require about three weeks to strike, when they should be potted in a mixture of two-thirds

sandy peat, and the remaining part loam; the loam to be increased at each potting, till the plants are large enough to be turned out in the borders of the house. They should be pruned back in October, and be allowed to remain rather dry till the following March.

*I. Sellowii* is another beautiful greenhouse climber, in habit much resembling *insignis*; the leaves are more glaucous, and the flowers are of a rosy lilac. It requires much the same treatment as recommended for *insignis*.

*I. tyrianthena* is a beautiful dark-coloured species, of much dwarfer habit than either of the foregoing, requiring only a large pot and a wire trellis of a good size, which a strong plant will cover with its splendid dark crimson flowers all the summer. The best soil for this is a free open loam, and rotten turf; they require to be kept moist all the growing season, that is, from March till October, when they die down. The tubers should then be kept dry till the following February, at which time they should be repotted, and started on again for the next season's growth. It may be increased easily by cuttings, the best time for which is May; take them off as recommended for the others, strike them in sandy peat, in a bottom heat, and, as soon as struck, pot them off into a rather stronger compost; do this as often as they require it, and they will produce flowers by the following September, after which they must be treated as for established plants.

*I. ficifolia* is one of the latest importations of this genus, and a very beautiful one it is. It agrees with the last-mentioned one in habit and culture.

*I. Learii* is now pretty well known, and deservedly so; no plant ever bore out the representations made of it better than this. The cultivation is very easy; the best situation for it is the warm end of a greenhouse, though it will bloom out of doors if trained against a south wall, or other warm place. It requires a very rich soil, to be well drained; the knife may be used freely, when planted in the open air; it is easily propagated by cuttings, or layers; cuttings may be taken during any of the summer months, and struck in sandy peat. If a stock is required to keep through the winter, the best mode is to lay them. Those plants in borders will produce a number of trailing stems, which are distinct from the upright growing ones; each of these should be

laid into a 60-sized pot, filled with well rotted leaf-mould, and either pegged down, or a stone laid on them; the growing end should then be fastened upright to a stick, or they protrude roots from every joint; these readily strike into the pots, and require no further trouble, and also form the best plants for the following summer. Being so thoroughly established before the winter, there is much less danger of losing them.

*T. mutabilis* is another very rapid growing species, agreeing in habit with *Learii*. In every respect it may be propagated in exactly the same manner. I am not aware if it will succeed out of doors, though certainly well worth cultivation within.

*T. rubro cerulea* is now giving way, in some collections, to its more showy conqueror, *Learii;* yet it will hold a place, and that a conspicuous one, as from its more robust habit it is better suited for the open air than is *Learii*. This species succeeds best when treated as an annual; the only point of difficulty is to observe the proper time for sowing it. If required for the open air, it is an object to get the plants as forward as possible, and it is in this the difficulty lies; for if the seed is sown too soon, the plants, when about a foot high, form flower-buds on the extremity of the terminal shoot, and immediately cease growing; all hope of such a plant may be given up. I have tried every thing to induce them to produce a new shoot, but without effect. The best time for sowing for the earliest plants is certainly not before the middle of March, between which time and the end of May, seed should be sown according to the time it may be desired to have the plants in flower. The seed should be sown in leaf-mould, and half plunged in a gentle hot-bed; they may be potted as soon as the seed-leaves are thoroughly expanded, and repotted as often as required, till they are large enough for the final planting. If the plants are required for early flowering, they should be brought forward in heat while young, and afterwards hardened off by degrees. They delight in a very rich soil; a mixture of turfy loam and leaf mould, or rotten dung from an old hot-bed, suits them best. Cuttings strike freely in bottom heat all the summer months.

This genus appears to me particularly deserving the attention of the experimental Florist, as no hybrids have yet been produced, (that I am aware of,) and many advantageous crosses might be made in it, with a view to produce hardier varieties, or

to improve in point of colour or habit those already esteemed hardy: one hardy species, *I. purpurea*, commonly known as *Convolvulus major*, seems to possess a natural inclination to sport; and from this, and its naturally hardy character, it might be selected as the female parent of a progeny yet unborn, but probably possessing the gorgeous colouring of their male parents, combined with the robust constitution of the one last named. Besides this, there are several others, now nearly obsolete, but which might be revived for such a purpose, being both hardy and of different colours to those commonly grown.

In conclusion, I will mention one other species:—

*I. quamoclit*, one of the prettiest little annuals grown. This should be sown in heat about the middle of March, and potted off when about three inches high; keep them frequently repotted, using a mixture of two-thirds leaf mould, and the other part loam, till they are placed in large 32's; continue them in heat till they show flowers,—then they may be removed to the greenhouse. These require only a small wire trellis. Some care is necessary to avoid over-watering. With this I take leave of one of the most splendid groups in British collections.

R. P.

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## THE LATE PROFESSOR DON.

It is our melancholy task to notice the demise of the late Mr. David Don, recently Professor of Botany in King's College, London; in whom botany, both in theory and in practice, has lost one of its most zealous, able, and successful students, and society one of its most amiable and estimable members.

As Professor Don was in the strictest sense of the terms a hereditary botanist, naturalist, and man of general information, it may not be amiss, before giving an exceedingly brief outline of the principal events of his life, to say something still more brief of his father. We have no occasion to dilate upon the character of either; they are safe in the memories of large circles of friends; and wherever either had an opportunity of making an impression, the remembrance of it is delightful.

Mr. George Don was a native of Kincardineshire; from which, however, his parents removed in his infancy. While yet a very little boy he revisited the place of his nativity; and the clergyman of the parish, having called on the family with whom Don was residing, found the nascent student of nature busily engaged forming into a natural system of his own all the wild flowers which he had been able to cull in the neighbourhood; upon observing which, the clergyman remarked, that a boy, who voluntarily entered upon such a course at the very dawning of life, would ultimately become one of the brightest and most successful naturalists of his time.

The hint was in so far taken, from this prediction, that Don was bound apprentice to the gardener at Dupplin Castle, in Perthshire, where the gardener was a near relation of his own. While in this situation he devoted his leisure time to the study of the natural sciences, especially botany; but he was careful not to neglect his employment in his profession. The fact is, that, while still at that age at which the majority of boys addict themselves to frivolous sports, Don was a general and successful observer in the fields, and student in the closet; and he continued to be so under all the vicissitudes of a very varied life. The botany of the Grampians, and the secondary hills at their base, was a favourite study with him at the commencement, and continued to be so till the close of his life.

After having shown at Dupplin that he was destined to become a botanist of the first class, he went to the south of England, in order to prosecute his studies in botany and the art of cultivation. After a short residence there he went to the continent, where he made a tour, chiefly with a view of knowing and comparing the botany and natural history of the different regions over which he passed; and when his continental tour was completed, he returned to Forfar, along with a relation of his own. Soon after arriving at Forfar, he took a fancy to the establishment of a nursery and botanical collection of plants; and in order to carry out this, he got possession of Doo Hillock, a spot remarkably well adapted for his purpose, from the great diversity of the soil, and consequently of the climate. Though of very limited extent, some parts of it are very elevated and dry; and the soil passes through all the gradations, from this to a sludgy peat bog. Consequently the soils best suited to every variety of British plants were found within a short distance of each other. While settled here he resumed

his observations of nature with fresh ardour, and in the course of his studies passed many nights on the Grampians, sometimes with the shelter of his cloak, and at other times with no shelter at all.

After residing for some time in Forfar, cultivating his ground, and studying the natural sciences, he went to Edinburgh, where he thoroughly studied in the medical classes, until he became an adept both in the theory and the practice of the healing art. He showed, indeed, that his powers were equal to the accomplishment to which he paid even a small degree of attention; for amid all this study and practice he evinced much knowledge and dexterity in the mechanical arts; and had his main studies not led him to different subjects, he would have been a first-rate artist in the construction of time-keepers, and the finer parts of spinning and other machinery; and, circumstanced as he was, he gave practical proofs of the skill of his head, and the dexterity of his hand, in such matters.

Some time after, having taken up his residence in Edinburgh, he was appointed Curator of the Botanical Garden there, and gave sufficient proofs of his fitness for the situation. This appointment brought him in contact with the ablest men in Edinburgh, of pursuits similar to his own; and, among others, Mr. Patrick Neill, Secretary to the Wernerian Society, and author of some admirable memoirs on scientific subjects. This friendship, begun in congeniality of feeling, went on increasing, till it was closed by the death of Mr. Don in January 1814, or the same month in 1816. Several years before this he had returned to Forfar, to resume the cultivation of his nursery, and the study of nature; and it was here that he resided when the world was deprived of him. Altogether, Mr. George Don was an extraordinary man, both for the vigour and the versatility of his talent; and had the vicissitudes of his life been recorded and prepared for the press by a competent biographer, they would have afforded one of the most curious and entertaining books, as well as one of the most useful ones that ever appeared.

Mr. Don was married, and had a family of fifteen children, of whom four sons still remain, who are eminent as botanists, as cultivators, or as both.

Professor DAVID DON was born in his father's cottage of Doo Hillock, in the year 1800; and he may be said to have been a botanist and cultivator from his very infancy, having acquired a

thorough knowledge of these subjects under his father, who made the best of all possible teachers; and along with these studies, and afterwards, he made himself no mean scholar in Latin, Greek, and Hebrew, and in the more useful modern languages.

Mr. D. Don continued in his father's nursery until he thoroughly understood the nature and method of cultivating all the plants which it contained; and as along with his practical occupation, whether in the observation of the plants or the best methods of their growth, he was a general student, he made himself, while yet merely a lad, a botanist of no mean acquirements and capacities, — we will not say pretensions, for few men, of any thing like equal capacity, have been so unpretending as Professor Don. Upon leaving Forfar he went to Edinburgh, in order to enjoy a wider range both of study and of occupation; and while there he had a charge of the conservatories and stoves in the grounds of Messrs. Dickson, brothers, nurserymen at Broughton, in the close vicinity of that city, who had at that time one of the best collections in Scotland.

After remaining there for some time, Mr. Don removed to London, where his brother George was at that time, and engaged in the Physic Gardens at Chelsea. Then, or soon after, Mr. Lambert, the great encourager of the botanical arts, was in want of a librarian; and Mr. Don's practical experience, general knowledge, and suavity of manner, recommended him as amply suited for the vacant situation; and he accordingly went to reside in the town mansion of Mr. Lambert, to the mutual satisfaction of both parties, and the gratification of Mr. Lambert's professional friends and visitors. This situation, and more especially the manner in which the duties of it were discharged, brought Mr. Don into general acquaintance with the higher classes of the botanical world; and, indeed, while merely librarian to Mr. Lambert, he was looked upon as a star of no ordinary magnitude. Soon after the death of Sir Joseph Banks, the illustrious Mr. Robert Brown resigned his situation of Librarian to the Linnæan Society and Curator of its Museum, and Mr. Don was chosen as a worthy successor to that first botanist of the age.

In this new situation, Mr. Don was found to be a most valuable acquisition to the Society; and his knowledge and manners endeared him to all, while his general character and conduct extended his name widely over the botanical world, in terms which, great

as was his modesty, must have been felt as peculiarly honourable, even by himself.

About the year 1836, he was appointed Professor of Botany in King's College; which situation he held jointly with the Librarian and Curatorship of the Museum. In the mean time he got married; after which he resided in the house of the Linnæan Society in Soho Square; but he never had any family.

He was seized with his last illness, in a serious form, in the end of April, or the beginning of May. It may be regarded as a general breaking up of the system, which assumed a topical character, and defied the skill of the most eminent men. Though latterly his disease became a very painful one, he bore it with singular equanimity of temper, until delivered both from the evil and the good of this world, on the 8th of December, 1841. On the 15th of the same month he was borne to his resting-place in St. Agnes' Cemetery; his remains being followed to that mansion of repose by Mr. Brown, Sir William J. Hooker, Mr. Bennet, Mr. Anderson, Mr. Smith, and various other first-class botanists, who, no doubt, felt the blank which had been made in their circle. Of his character, we need add nothing to what has been already embodied in this brief notice.

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## ON EXHIBITING FLORISTS' FLOWERS.

TO THE EDITOR OF THE FLORIST'S JOURNAL.

THAT the present age is one of improvement in all departments of horticulture, the splendid annual exhibitions in different parts of the kingdom fully testify; yet, from practical observation, it forcibly occurs to me, that an evil exists in many Societies, in the mode of exhibiting florists' flowers, which requires immediate amendment; and I therefore trust the consideration of the subject will be taken up by committees of every Society where this practice is permitted, to the end that it may be fully discussed in all points.

It is the prevailing custom at various shows to judge flowers in classes; and in many places where this plan exists, the same variety of flower is not permitted to be exhibited more than once in its

class, except where premiums are given. The tendency of this mischievous and impolitic principle leads to great disappointment in the minds of visitors, as regards this part of the exhibition, who, upon inspecting the various classes of prize-flowers, in expectation of seeing only first-rate varieties, find, that out of a row of perhaps from eight to twelve blooms, not half a dozen in which the requisite qualities of a fine flower are fully developed; the remainder (from the contracted principle upon which the judges are bound to act) being composed not of the best flowers, (because it would take in a second time the same sort,) but for variety's sake inferior ones, very few of which would attract the notice of a grower, were he to see them in a collection; when, on inspecting the stage where the unsuccessful flowers have been deposited, they discover splendid blooms, infinitely superior to many of those placed as winning flowers; and the decision of the judges becomes naturally questioned.

It is universally admitted, that the object of all horticultural Societies is to promote the cultivation of fruits, flowers, &c., by creating an emulative spirit amongst the various growers, to produce the finest specimen; then why should any regulation be suffered to remain in force, tending to defeat so praiseworthy an object?

It is not unreasonable to suppose, that a small grower with his score pots of leading flowers, may be able, occasionally, to produce a bloom that might compete with growers on a much larger scale, and yet fail to obtain the precedence, and whose reward and encouragement for future efforts, is in seeing his flowers placed on the discarded stand: such flowers, being meritorious ones, would have stood prominent in classes, if an unlimited mode of exhibiting had been adopted. I am convinced that amateurs, who only possess means of growing on a limited scale, but whose principal chance of success is in classes, would be induced to enter the field of competition, instead of being deterred by the overwhelming chances against them.

Another advantage might, I think, accrue to wholesale growers, as it would, in all probability, lead to an increased demand for *good sorts*, whilst the inferior varieties would naturally improve the stock of border flowers, by an addition of such sorts as ought never to have been exhibited on a prize stage.

I would suggest that a committee of growers be appointed by each horticultural Society in the kingdom, and that they be in-

structed to decide upon the price at which new productions ought to be sent out, and also to grant certificates under their hands, containing a true statement of the real merits of such flowers, which, I apprehend, would be an ample guarantee to purchasers; the public would not then so often see the announcement of new varieties going out with a character of "first-rate," which after being thus introduced, bloom, then sink into oblivion, and are heard of no more.

I anticipate that my suggestion will meet with the decided opposition of those parties who are in the habit of sending out, annually, numbers of seedlings, by which florists' flowers have of late increased in quantity more than quality; but, if such persons had been purchasers of worthless varieties at a high price, I think they would be as anxious as myself to have a standard adopted, for testing the merits of new flowers.

As exhibiting in classes is the adopted mode of testing the merits of flowers singly, let them be thrown open so as to admit all the best blooms, whether of one variety or several; and at once set aside the narrow principle which dictates the placing of secondary sorts, for variety's sake; then we shall soon perceive, that, in many points, the interests of florists will progress as rapidly as they have of late retrograded.

FLORISTA.

RUGBY, *Oct.* 18, 1841.

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## THE FLORIST'S LETTER BOX.

WE would by no means advise "W. D." to heat his green-house by means of one of Dr. Arnott's stoves, even though it should give out the required degree of heat, and distribute it uniformly over the house, of both of which we have doubts. A species of distillation is carried on in these stoves, as is proved by the condensation of impure water in one part of them, of which we have heard frequent complaints when they are used in common apartments. We have reason to believe also that they give out a vapour which is injurious both to animal and to vegetable life; and this of itself is strongly against their use

in green-houses or stoves. A common flue is also both a clumsy and an expensive means of obtaining artificial heat, and therefore we would not recommend it, especially in a small green-house. The safest, simplest, most easily managed, and, in the end, by far the cheapest means of heating such houses as that which W. D. is erecting, is the pipes, or tubes, for circulating hot water, constructed by Mr. Weeks, jun., of Gloucester Place, King's Road, Chelsea. All the heat required is just what suffices to dry the air when too damp for the plants, and to heat the house a few, but not to many, degrees above freezing, in cold weather. These purposes could be fully accomplished by a set of pipes surrounding the house, a little way inside the walls. They consist of a double set—an open one, for conveying the water from the fire to the distant parts, and a lower one, for carrying the water back to the cistern—and thus carrying on the circulation. The first of the pipes takes up the new supply of water, and it is discharged back into the cistern with very little waste. Thus, in a small green-house, a few pitchers of water will keep up the supply during the whole season that artificial heat is required; very little fuel is necessary, from the extent of surface which the pipes present to the fire; and thus the management costs very little expense or trouble, and the apparatus is not liable to get out of order. Altogether it is cleanly and economical, and soon repays the few pounds of cost.

We agree with "P." in thinking that private gardeners to noblemen and gentlemen are the real parties to whom we must look for the improvement of floriculture. The production of new varieties and superior flowers is their main object, without any reference to the increase of mere number and the profits of soil—considerations which must necessarily take the lead with every nurseryman and mercantile florist, whatever may be his abilities. Therefore, every thing which tends to lower the condition of those private gardeners who have the charge of numerous, varied, and valuable collections, is a serious injury to the science of flowers, and the art of cultivating them in the best manner, as well as to the making of those experiments which are calculated to bring to light their most valuable properties, and stock the grounds and houses with new and splendid varieties, independently of imported plants.

"P." is perhaps right, when he states that Sir William Jackson Hooker is not so skilful in the practical cultivation of plants as Mr. John Smith, of the Royal Gardens, Kew; for the latter is not only intimately acquainted with the nature and growth of every species of plant in that extensive and valuable, though once sadly neglected collection, but many fine specimens, which have been reared from seeds or cuttings, now stand witnesses to his ability and assiduity. Still, though we readily admit all this, we demur to the conclusion that Mr. Smith ought to be promoted to the office now filled by Sir William. The fact is, that there is room for them both, and they may mutually be of great service to each other, and jointly to the science and practice of botany. The name of Sir William Hooker will give *éclat* to the establishment. His urbane and gentlemanly manners will attract the esteem of every body, and make the working men labour with cheerfulness and assiduity; and in addition to this,

we are quite certain that Sir William Hooker, instead of going about to reduce the emoluments and degrade the character of gardeners, will do what is in his power—and it is not little—to alleviate them by more fair and honourable means.

[As the readers of the FLORIST are numerous, and distributed over all parts of the country, and as many of them are dealers in flowers, or purchasers of them, especially the choicer sorts, its cover is one of the most eligible vehicles for all kinds of Advertisements relating to Floriculture, including those gentlemen for first-class gardeners, and gardeners for situations. Lists and catalogues, of the size of the Journal, stitched in on fair terms.]

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## THE WEATHER FOR DECEMBER.

LIKE all the rest of the year, December has been peculiar; and from its character it is difficult to infer what the remainder of the winter shall be, and still more so to come to any certain conclusion with regard to the ensuing spring. Down to the middle of the month there was not a great deal of frost, nor was it of any long continuance, though quite enough to destroy the later blooms of the Dahlias and Chrysanthemums, especially in low and damp situations. This last destruction was a subject of regret, because the Chrysanthemums were in finer bloom than they have been for several years.

The native and other hardy plants, which are too strong for being hurt by such slight frosts, never showed better at the same season. Early in the month we observed, in sheltered situations, Dandelions, and some others, with the flowers in bloom, which are not very often seen after the middle of November, and sometimes not so late; and this was not a premature bloom, or untimely coming on of the vegetation of the ensuing season, but a lingering remains of that of the season which is past. The flowering shrubs, and the blossoming trees, have also been let down by the gradual withdrawing of the summer heat, and not by any violent change arising from the shifting of a great atmospheric current. Those circumstances, notwithstanding the autumnal rains, have been favourable to the ripening of the wood, and the bringing forward of the flower buds; and though the temperature in the early part of the month was mild, the evaporation from the humid earth prevented anything like the starting of a new growth, which is the grand autumnal evil, as the new growth which it shows is only a robbing of the following year.

About the middle of the month frost set in, and it may proceed to a severe winter; but hitherto the progress has been slow.

## CALENDAR FOR JANUARY.

We have to apologize for the accidental omission of the Calendar in the last Number of the Florist's Journal.

Stove.—The winter treatment must be continued to plants here during the present month, though the cultivator must bear in mind he is approaching a busy season, and prepare accordingly; the pots should be frequently examined, in order to ascertain if the drainage is good. Keep the plants rather dry. A few Roses, Hyacinths, Camellias, Lilacs, Rhododendrons, and other American shrubs, should be brought in about once a fortnight, to afford a good succession. Keep every thing clean, and relabel all plants requiring it.

The medium temperature should be about 60°.

Greenhouse.—The treatment here should correspond with that recommended for the stove. Remove all dead or decaying leaves, &c., from Geraniums and other plants. Chrysanthemums should have a good supply of water, also Camellias. Ericas, and other Cape plants, must have a light airy situation; if mildew appears, strew a little sulphur on the parts affected; avoid using more water than is absolutely necessary. Mignionette, and other annuals for early flowering, require as much light and air as can be supplied them. Fumigate, whenever necessary. The medium temperature should be about 45°.

Flower Garden.—Little can be done here beside preparing for spring. Pansies that were planted out in the autumn, should be protected by whelming a small pot over each plant, or by covering the beds with fern or other litter. Top-dress Auriculas; in doing this, remove the old earth about an inch and a half deep, and replace it with a mixture of leaf mould and light loam; they must be well protected from wet; give air to them on every favourable occasion. The same may be said of Pinks, Picottees, and Carnations. A small quantity of Mignionette, ten-week and German Stocks, and other annuals, may be sown in a frame for early flowering. Sow Dahlia seed towards the end of the month, in a gentle hot-bed; and if a large stock of plants is required, a few roots may be forced at the same time. Protect the beds of Ranunculus and Anemone, planted in the autumn, from severe frost.

This is the best season to commence operations on new ground intended for ornamental planting. Prune shrubs in open weather, and finish digging flower beds. Secure newly planted trees and shrubs to stakes. Prepare sticks, labels, matting, and other things; in short, leave nothing undone that can be done now, as the next two months is the busiest part of the year.





Engd by Alfred Adlard

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THE

# FLORIST'S JOURNAL.

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## PRIMULACEÆ,—

### THE AURICULA, AND ITS KINDS AND CHARACTERS.

PRIMULACEÆ, the name of this order of plants, is derived from Primula, the primrose, which gets that name from its early flowering, being among the first flowers of the spring, and also the most common of all the order, as a native of Britain. There are a good many genera, though many more species and varieties; and the majority of them are natives of Europe, though there are several in Northern Asia and North America: but in the tropical latitudes, and to the southward, there are none.

With few exceptions, they are all hardy plants, and do not require either a stove or a bottom heat—indeed most of them are injured by either. In Britain, there are three domestic species,—1st, the primrose, which is naturally of a beautiful straw colour, but changes to other shades, generally of red or lilac. The leaves of all are close by the ground; and, in the primrose, each flower rises, from the root, on a distinct footstalk. 2d. The cowslip, which is larger in its flowers than the primrose, naturally of a bright yellow, but breaking into various colours; and the flowers rise on a single stem, forming a truss, which gives the plant a much more showy appearance than the primrose. 3d. The oxlip which is much larger than the cowslip, and rises still higher in the stem. It breaks, by culture, into many more colours than either of the other two; and those colours are often rich and finely diversified in the same floret. In this state, it is the Polyanthus of growers, and is the only British member of the order which is

a florist's flower; though the whole may be planted in borders, to which they give a good effect.

The Auricula is a native of the Alps, and by much the finest flower in the order, and the one that admits of the greatest improvement by culture. It requires a rich soil, and a free, pure, and dry atmosphere: and it is only about the time of flowering that water is not injurious to it, and even then, water ought not to be allowed to stagnate about the roots or the base of the stem, otherwise they are liable to turn sickly, and "damp off." The Auricula requires most attention in this respect, and also in the compost in which it is grown, and the situations in which it is placed; but still it is not fond of artificial heat, though protection from the frost, during the time of coming into flower, is of service to it; but there must be no artificial heat in this covering, and the plant must, at all seasons, have as much free air as possible.

Its native soil and situation point out those that are best adapted for its health and vigorous growth, as a florist's flower; but the soil, in order to obtain the full vigour of growth, and especially the perfection of flowering, must be richer than that in which the plants grow naturally. The native soil is a compost brought down from the more elevated parts of the mountains by the rains which beat strongly on the slopes, but of course do not stagnate there. But this soil makes short pauses, in the small transverse hollows, and it is in them that the compost accumulates. It consists of loam, of different vegetables, especially the fine mountain grasses, in a state of decomposition, of the droppings of mammalia and birds, and of sand run sharp and clean by the water. These materials are deposited in small quantities at a time; and thus the little beds are as completely mixed as the best prepared artificial compost; and if nothing were required but healthy growth, and flowers of the natural colours—which are various, there could not be a better soil for the growth of Auriculas. But the florist's Auricula, which is one of the most artificial of flowers, especially in its florets, which are artificial, not in tint merely, but in the character of the colours, requires an equally artificial compost and treatment. It was first introduced about 250 years ago, when principles were little understood; and, though there have been as many nostrums for the growing of an Auricula as for the curing of a disease, and as a number of these have all answered the

purpose equally well, every grower has thought his own the best possible.

The basis of them all, is loam, decayed vegetable matter, sand, and manure; and though the most stimulating manures have some effect on the quality of the flowers, nobody can tell what this effect specifically is, and this prevents any farther conclusion than that some parts of the very complicated manures and composts must be useless. Thus, some recommend goose-dung, but there is no goose on the Alps; and others recommend sea-sand, though none ever comes there. Consequently, any other manure equally rich, and any other sand equally sharp, would do just as well.

*Kinds, parts, and properties of Auriculas.*—When we say "kinds," we do not allude to the tints of colour, but to single-coloured and painted, the last of which are the most esteemed. The parts are:—1. The grass, or bunch of leaves, immediately on the root. These leaves should be handsomely formed, a little bent back to show the main stem, serrated or cut at the edge, and of a fine lively green, whatever may be its shade. 2. The main stem: this should be erect, firm, and elastic, so that it may support the truss, and as tall as it can be, without making that look mean. If the stem-leaves, where the peduncles of the florets branch off, are in the way of the blooms, they may be removed, at least from one side; but all trimmings and cuttings of an Auricula must be very nicely done. 3. The peduncles, or stems of the individual florets. These must not be so short as to crowd the florets, nor so long as to scatter them; and they must not be drooping, as that gives an appearance of weakness to the truss. 4. The blossom, or pip, is the important part of an Auricula, to which all the others are merely auxiliary. It consists of the edge or outer rim; the eye, or inner rim; the pipe; and the lines within the tube or pipe.

In self-coloured Auriculas there are various shades, but the eye and the edge are the only ones that are different in the same flower; in painted or party-coloured ones, the eye is generally pure white, and the edge or broad part of the petals all of one colour; but there very generally is a lacing or small border of pale colour round the edge. Taking all the varieties, the shades of colour are exceedingly numerous; but the edges of the finer painted ones, which are most esteemed by cultivators, are white,

grey, or green; the last being the most esteemed, when the flower is good in other respects.

The colours in the disc or face, and more especially in the edges of the Auricula, are peculiar, quite different in character, and superior in brightness to those of any other flowers, of the same tint. Most flowers decompose the rays of light, more or less, according to the angle at which it falls upon them, and thus the visible part of the flower does not appear to be all of the same tint; in most of them, too, there is a reflection which deadens or changes the colour in every light; but neither of these imperfections belong to the Auricula. Its colour is the same, at whatever light the angle falls upon it, and it is without glossy reflection, so that it always shows in the most absolute perfection. The reason is the following:—Common flowers display their colour by the parenchyma showing through the epidermis, as a continuous substance, to which the latter gives a gloss, bearing some resemblance to that of a varnished picture, and, before the colour can be rubbed off, the epidermis must be destroyed. In the Auricula, again, the colour is given out by vesicles inserted upon, or outside, the epidermis. They are so very minute as to be microscopic, but they are there; and, if they are rubbed off, the colour may be destroyed, without disruption of the epidermis. In this they bear a considerable resemblance to the tints of a painted butterfly, which may be rubbed off, without injury to the general covering of the wings; besides these colouring tubercles, the flower, and often the stem, of the Auricula, are covered with a farina or powder, usually of a white colour, which gives peculiarity to the blooms, and also to the leaves and stems; but it should neither be wanting, nor too abundant.

Besides the particulars that have been mentioned, there is a proportion and symmetry in all the parts of a good Auricula which cannot easily be described in words, but which are more or less felt by everybody, and which, at once, strike the eye of an experienced florist. Perhaps the best general description is, that no part should be so superior to another as that that other shall appear to be made for and subservient to it. We have already spoken of the grass, the main stalk, and the peduncles, so that it only remains to say a few words respecting the truss, and the florets of which that is made up. The truss should be in proportion to the stem, so as not to overload it, or appear magnificent in comparison;

the florets should be large in size, but not too numerous; and, if they are the latter, they should be neatly trimmed off with sharp pointed scissors, before the growth is too far advanced. If this operation is too long delayed, the superfluous florets will have absorbed much of the action, and those which remain on the truss will be inferior. In no instance should more than one truss be allowed to rise from the same root. The whole disc or face of the florets should be exactly level, and at right angles to the peduncle. It should also be perfectly circular in all its parts, and the outline of each should be well defined. There ought to be a due porportion of the coloured edge, the eye, and the pipe; for if the light colour is in excess the floret will look poor, and if there is not enough of it, it will seem overloaded. The petals should also be of the same shape and size; and the floret should be quite uniform all round. Perfection of the eye is a great beauty. The flower belongs to the Pentandria Monogynia of Linnæus, and the stigma should be exactly in the centre, with the five stamens ranged equally round it, so as to fill the pipe without crowding it; the style or stigma ought not to rise higher than the stamens, forming what is called a pinned eye, which is reckoned a great deformity. Above all, the plant should have a healthy appearance; for, if it have not, the florets will not be perfect in shape, or have the full richness in their colouring.

Our original intention was to include in this article the mode of flowering the plant, and reserve only the treatment in a state of rest for a future one; but as the space which we can afford is already full, we must defer the whole subject of the propagation and culture to another number, which will be nearly in time for the flowering of 1842.

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## THE WATERING OF PLANTS.

THERE is no part of the practical treatment of plants which requires more knowledge on the part of the cultivator, than the application of water to them. This applies to ornamental shrubs, as well as to herbaceous plants; and it applies to them in every situation, if the nature of the soil, the weather, and the habits of the plants, require it. It is within doors, however, whether in the greenhouse, the conservatory, or the window or flower-stand

in a room, that the greatest skill and attention are necessary, because the plants which are placed in these are, generally speaking, more tender; most of them are more seasonal; and, except in the case of those which are put out of doors in the end of summer, for the purpose of ripening and hardening the wood, they do not enjoy the vicissitudes of a free atmosphere, either to refresh with showers, or to clear them of dust by the wind. Plants which are kept within doors have to depend wholly on artificial watering; and the time and extent of that must be regulated by the nature of the plants.

This cannot be done, except by those who have made themselves intimately acquainted with the characters of plants, and the qualities of the climates, soils, and situation, in which they grow naturally. This knowledge is not possessed by any except experienced gardeners, who have thoroughly studied the principles of their art, and practised that art on a very varied scale; and these form but a small section of the lovers and growers of flowers. Amateurs who cultivate flowers in windows or small greenhouses, seldom possess this knowledge; and even professional gardeners are very deficient in it, if they have not, at some time of their lives, had the management of an extensive and varied collection, or, at all events, seen how such a collection is managed by a skilful and practised gardener. Therefore, every young gardener should endeavour to spend some time in an exotic nursery, however subordinate his place may be; and he should make friends of the foremen of the different departments, as they are the men that can give him the information that he wants. Amateurs, again, who cultivate on a small scale, can have some directions from the nurserymen who supply them with plants; and, in addition to this, they must pick up whatever more they can. Those who love their flowers, even if these are only a few pelargoniums, never let them suffer for want of water. The fault is all the other way; for more plants are disfigured, and even killed, by too much watering, than by any thing else. When a plant looks sickly, and the leaves lose their healthy colour, and some of them drop off, too much water is very often the cause; and the general means of attempting a cure is to give them more. This treatment is injurious to all plants grown within doors, except such as are aquatic, or natives of marshes that never dry; but is most injurious to plants of tropical climates. These

are usually the choicest in the collection, and also the most expensive; and by the *Sangrado* system, it is rare for one of these unskilful waterers to keep them alive for a year. In the case of plants of pretty high latitudes, such as Britain, the rain of the cold months is seldom able to stimulate them to unseasonable action. Nature prepares them for the season; that is, they are adapted to it, and therefore they suffer more from unusual drought in the summer, than from the rain of the most dripping winter. If, however, the rain is accompanied by a temperature unusually high for the season, the plants are liable to be excited into premature action, and this spoils them for the ensuing summer, and often kills them.

If the plants are natives of very high latitudes, or of mountains which are so lofty, that the plants are mantled up in snow during their season of repose, another sort of treatment is required. The ground under the snow is, in severe weather, much warmer than the exposed places; and if rain falls, it no more reaches the plants than the cold atmosphere does; but plants so covered up never become dry, and therefore the roots should be kept moist, but no water should be poured into the pots, as that rots the roots instead of stimulating them to premature and therefore unhealthy action.

It would be out of the question to detail the time and degree of watering required for every genus of flowering and ornamental plants; and so we must leave that for the articles on the culture of single genera or species, which in our journal are supplied either in substance, or as they appear in print, by the actual cultivators.

But though we cannot give the detailed operations, we may state a few of those leading principles, in obedience to which a skilful gardener so regulates watering in quantity, as to have his plants always in healthy condition.

The first thing to be considered is the water itself; it should, if obtainable, be soft water, that is, water containing no earthy salts, and special care should be taken that it is free from all oxides or salts of iron, which are highly injurious to vegetation, even to the coarse vegetation of a moor or marsh. Water of the proper quality being obtained, the next thing to be considered is the state in which it should be given to the plants. It should be as nearly as possible of their own temperature; and as water is, generally speaking, naturally a little below that, it

should be placed in the sun, or in wide and shallow vessels all night, in the same house or room with the plants. If it is colder than the plants it chills them; and, strange though it may seem, if it is too warm it chills them also. In the first of these cases, the direct application produces the mischief; and in the second, the rapid evaporation of the too warm water produces cold, which occasions a more injurious chill than even the cold water. This also points out the times of the day when no water should be given. These are the hottest times of the plant; because at those times, both kinds of chilling are brought into operation, and if the plants are very delicate, they are apt to receive a check from which they never recover; or if they escape being killed, they are sickly, poor, and unsightly, ever after. Water ought never to be given to plants while exposed to the rays of the sun, whether it be when they are most heated for the day or no. Nature teaches us this; for natural watering always comes from a cloud, which cloud intercepts the direct sunbeams, whatever may be the temperature of the air. There is another lesson of nature which is worth attending to. In the latter part of spring, and in summer, rain clouds are usually high, and the drops are large; whereas, in autumn, the clouds are lower and the drops smaller. In seasonal countries, especially on the slopes of mountains, within the tropics or nearly so, the rain also falls in heavy drops, but the water speedily runs off without stagnating, or being to any great extent converted into vapour. Such plants should therefore be watered from the nose of a pot held at a considerable elevation; and as in an artificial state the water cannot run off from them as it does in their natural habitats, the discharge of it must be provided for by porous soil, and bottom-drainage.

Plants which are natives of the low places of tropical countries, where the water floods the surface during the rains, and especially in close forests, where the ground is continually moist, and approaching to a marsh, the air is loaded with warm vapour, approaching the character of a fog, and this continues for a while after the rain is over, and then the air becomes dry, and continues so until the next rains set in. Plants from such situations must, during the growing season, be copiously watered, and the house must be so warm, and the floors, shelves, and other stands of the plants, so moist, as to keep the air within the house humid with vapour. In these forests there are very few ground plants, and still fewer

worth cultivating as flowers; but Epiphytæ,—or plants which adhere to trees, have holdfasts, and not sponglet roots, and derive all their stimulus of moisture from the air,—are exceedingly numerous.

The season during which to give water or withhold it, should be well known by every florist; and as that depends on the state of the plant in its native locality, the nature of that locality should be known. In the case of newly-introduced plants, the florist has nothing but this to guide him. He may indeed acquire knowledge by experience; but the experience is dear bought, because he is likely to kill a dozen of plants before he finds out the proper mode of cultivating one. Up to a period comparatively recent, this trial and error was the general and almost the only means of arriving at any thing like knowledge of the proper mode of treating plants; and so long as this was the case, every place where a collection was kept was a sort of vegetable slaughter-house. If such was the case among professional cultivators, it must have been worse than this among amateurs, especially such as had small collections in windows only. When tropical plants became pretty numerous, and were generally distributed, very few could keep them alive, or even in tolerable condition; and thus, the leaves of shrubs were poor, the plants themselves dwarfed and scraggy, the flowers very inferior; or if the plants lingered in existence for a few years, they ceased to flower, then to make shoots, and after this they died. If it had been the custom to hold inquests on dead flowering plants, the verdict in the great majority of cases would have been, "Found drowned;" and a *post-mortem* examination by a skilful florist would have led to the same conclusion.

With scarcely one exception, flowering plants have a season of repose; but in a miscellaneous collection this varies much, both in length and in the time of the year. Generally speaking, it begins soon after the flowering and ripening of the seeds, unless in the case of those plants (the Rhododendrons, for instance,) which bring forward their flower-buds to a considerably advanced state in the autumn. In the majority of flowering plants, the season of repose lasts from the ripening of the seeds till the plant begins to show signs of growth in another year. The usual order is—first, the individual growth of the plant in stems, leaves, and shoots, varying according to its habit; but where the flower

comes first, the active season closes with the growth of shoots and the formation of new buds. In some tropical countries, there are two rainy seasons, with a dry interval between them, but of more brief duration than the proper season of drought. Very many of the flowering plants of such regions have two corresponding seasons of growth, with a short interval between them. In the first season, they complete their individual growth for the year, then they repose for a time, at the end of which they flower and ripen their seeds, and this being done, they take their long repose.

But whatever may be the period of repose, or the time of the year in which it takes place, no artificial stimulus should be given to the plant in heat, and more especially in water; because the first of these may bring on an abortive growth, from the effects of which the plant will never again recover, and the second will make the plant damp-off and die. When the proper seasonal growth comes round, either naturally or by judicious forcing, the plant should get water in greater or smaller quantity, according to its habit; but little water should be given at the commencement, because an over supply then is sure to injure the flowering quality of the plant. As it comes into vigorous growth, the quantity of water should be increased; but water ought never to be allowed to stagnate about the roots of a flowering plant. This soaks and weakens them, and so binds and consolidates the mould about them, as to exclude that supply of air which is just as necessary to the healthy growth of roots as of stems, leaves, and flowers. If the plants are so situated, as that the leaves are covered with dust, they should be syringed or watered on the under sides of the leaves, from a pot with a rose turned upward; but unless the mould is very porous, and the drainage in the bottom of the flower-pots free and good, much water should not be allowed to get into the pots. When the plants come into flower, the watering of those that require it should be very gentle; and when the seed is in progress of ripening, little or none should be given. If the repose immediately follows this operation, the plants should be removed into a colder situation than that in which they have their growth and flowering, and then they want nothing but protection against the cold, until they show signs of action.

These general hints apply chiefly to house plants; for hardy flowering plants of beds and borders, that can stand the whole

winter of average years, require nothing but watering the bed or border when they begin to suffer from drought, and protection from keen frosts and cutting winds. Many of the more delicate ones require a covering during the whole winter, but this should be of some matter which is permeable by the air and a bad conductor of heat; as this not only protects from severe cold, but, as is the case with snow, stops the heat which radiates from the earth, and thus keeps the plants warm in all their structure. But it must be borne in mind that this makes them delicate, and that, therefore, the covering should be removed gradually, and replaced at night till all danger of keen frost is over.

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## ON THE DIFFERENT CHARACTERS OF CLIMBING PLANTS.

Of plants there are two very obvious distinctions; namely, herbaceous and ligneous. The first have a fibrous frame, of very delicate texture, clothed and embedded in cellular matter, variously arranged in cuticular and also internal membranes; the second, in the early stage of their existence, are similarly constituted, but their fibres become gradually woody and very durable. The positions of the stems of both these distinctions are various: some are erect, others declining, many are procumbent, and several are convolving or climbers.

It is on the last of these we shall offer a few remarks. Climbing plants, whether ligneous, as the grape-vine, or herbaceous, as the cucumber, are furnished with tendrils, which have an involving tendency, and by which they twine round any other plant or slender body which they can embrace. It is observable that these tendrils convolve first one way, for half their length, and the other half the contrary, especially if the first convolutions take no hold. The fact of plants being furnished with tendrils is an evident sign, that, in their culture, they should be supplied with a trellis, or some kind of prop, to climb upon; and these trellises, or props, should be so formed as to suit the manner in which these prehensile members cling to their supports. Tendrils are of various character; some, as already said, are convolving; others have no tortuous tendency, but instead thereof have their

points enlarged, like the paw of an animal, and with which they cling to any rough surface; others again are provided with numerous fibrous processes along the branches, and which adhere to any solid body with which they come in contact. These kinds of tendrils are exemplified by the ivy and Virginia creeper.

Tendrils are produced from different parts of the plants: from the joints, as in the grape-vine; from the bark of the shoots, as the ivy; from the points of the leaves, as in the pea; or by the twisting or bending back of the petioles over any horizontal body, near which they grow, as in the Virgin's bower.

Another class of climbers have neither tendrils nor fibrous processes to assist their climbing tendency. Their stems having a convolute structure, which, as they are lengthened upwards, keep twining round any perpendicular body within their reach. The hop and the scarlet-runner kidney bean are familiar examples; both these climb to a considerable height, on poles or rods placed close to them for that purpose. It is remarkable that these two plants ascend spirally, in contrary directions; the one turning with, the other against, the apparent motion of the sun; thus showing that their convolute action does not depend on, or is caused by, any external influence to which these plants are subject. It also appears that some climbers gain elevation by a convolvant, and others by a retrovolvant action; depending, no doubt, on the structural constitution of the stems.

Whatever may be the cause of these curious movements of plants, the cultivator's treatment of them is clearly enough pointed out by their habit. Hence props of various forms are employed, as well as trelliage erected in various figures, either within or without buildings, and either movable or stationary, and composed of either wood or of wire; of the latter material, some are highly ornamental as well as useful.

Of climbing plants, in general, it may be averred they are extremely elegant in their positions, and a great majority of them bear large and beautiful flowers. There are hardly two genera to be found more splendidly elegant in their blossoms and habit than the *Passifloreæ* and *Convolvulaceæ*; from among which the most suitable ornaments for covering the columns of stoves, conservatories, and greenhouses, may be selected. The hardy sorts, whether herbaceous or woody, are admirably adapted for covering naked walls, forming arbours, screens, or boundaries in flower-

gardens. The greater part of them are, moreover, easily propagated, by seed, by layers, or by cuttings.

The following are a few of the most showy tropical climbers :—

Convolvulus verticillata.
Thunbergia grandiflora.
Heteropteris cærulea.
Convolvulus maximus.
Cryptostegia grandiflora.
Pharbitis Learii.
Teramnus volubilis.
Galactia pendula.
Dalbergia scandens.
Ipomœa Roxburghia.
——— involucrata.
Thunbergia coccinea.
Columnea scandens.
Combretum purpureum.
Corepegia elegans.
Aristolochia adoratissima.
Petrea volubilis.
Bignonia floribunda.
Combretum comosum.
Ipomœa longiflora.
Ipomœa speciosa.
Quisqualis pubescens.
Bignonea venusta.
Ionesia scandens.
Pterocarpus scandens.
Nepenthes phyllamphora.
——— distillatoria.
Clematis grandiflora.
Bignonea grandiflora.
Banisteria splendens.
Thunbergia elata.
Solandra grandiflora.
Gonolobus grandiflora.
Passiflora hirsuta.
——— edulis.
Bauhinia scandens.
Jasminum angustifolium.
——— scandens.
Ipomœa grandiflora.
Beaumontia grandiflora.

The following climbers are suitable for either the greenhouse or conservatory :—

Cobæa scandens.
Clematis chinensis.
Jasminum grandiflorum.
Clematis Massoniana.
Caparis spinosa.
Aristolochia glauca.
Kennedia monophylla.
——— coccinea.
Lophospermum rodochiton.
Passiflora cæruleo-ramosa.
——— incarnata.
Caprifolium Japonicum.
Caprifolium flexuosum.
Tecoma grandiflora.
——— capensis.
Billardiera fusiformis.
Convolvulus pannifolius.
Sollya heterophylla.
Bignonia capreolata.
Billardiera scandens.
——— longiflora.
Wistaria consequana.
Kennedia Comptoniana.
Lophospermum erubescens.

Hardy climbers being so common and well known, need scarcely be named ; but a few may be mentioned, especially as several of the new roses have acquired the character of climbers. Of these the principal are what are called Ayrshire roses, of which there

are several fine varieties, of different colours, both evergreen and deciduous. The Alpine and Banksian roses are also climbers, and from them several hybrids have been raised. These roses, trained on a pyramidal frame, have a fine effect, as single objects, on turf or elsewhere. Other hardy climbers, or trailers, are the families of *Atragene, Clematis, Vitis, Ampelopsis, Aristolochia, Jasminum, Periploca, Passiflora, Hedera, Wistaria,* &c. &c.

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## AUTUMNAL HUMIDITY.

THE moist and rainy character of the autumn of 1841, and the effects upon vegetation of the moisture thereby communicated to the atmosphere, with the results, some of which we have seen, and of others we have been informed from authentic sources, have led us to offer a few remarks on the influence of an over-moist atmosphere upon vegetation, not only during the autumnal months, but at all seasons of the year. The British islands have a more humid climate, or, at all events, a climate more habitually humid than any other region on the globe. There are many countries where a greater depth of rain falls in the course of the year; but there is none in which the air is so habitually charged up to nearly the point of saturation, or that at which rain begins to fall. The consequence is, that a very slight diminution of temperature, or of atmospheric tension, brings on a shower, and a still slighter change causes a formation of dew, on the surface of the earth, and also on those plants with which it is clothed. The result is that the British islands never have a continuous season of drought, even equal to that of continental countries situate in the same parallel of latitude, and at the same height above the level of the sea.

One year differs much from another, both in the total quantity of rain and in the portion which falls during any particular period of the year; but this, instead of rendering the climate more advantageous to vegetation, only makes the state of things worse. The changes from year to year have the same effect upon plants, as if these were moved about to different climates, and placed in the one, before they were tempered to the other; and the changes which take place, at shorter intervals, make the growing of the plants very unsteady and irregular. At those times when they would

require a continual drought, they have to bear rapid changes of drought and moisture, and it is the same when they would require to be habitually moist. It is not the rain which falls in showers, whether those showers are of longer or shorter continuation, which is so hostile to the proper growth, and through that to the superior blooming of plants; for, in those places of the world where the year is most seasonal, and the periods of drought are the longest and most intense, more rain generally, indeed one may say, invariably, falls in the course of the year, than in the most rainy districts of Britain. Not only this, but the showers are heavier, falling in absolute torrents; and yet the air is not so much saturated with moisture, even in the intervals of the heavy showers, as it is in Britain during the drought. But, instead of hurting the vegetation, by thus suddenly arousing it from a state of perfect repose, the growth which this stimulates is more vigorous, and the flowering more perfect. So much is this the case, that the change, from a plantless desert to a paradise of the choicest flowers, is made in a very short period of time. Nor is it only in tropical countries where the average heat is greater than in Britain, that this takes place; for it occurs in places of North America, where, though the summer temperature is as high as that of the warmest parts of the tropical countries, the thermometer, in winter, falls much lower than the freezing point of water; indeed almost as low as that at which mercury becomes a solid metal, and would bear hammering on an anvil. The change is also very rapid; and in Russia and other parts of the north of Europe, where, though the summer is comparatively hot, and the winter very cold, the average heat of the year is lower than that of the British islands.

In the one of these examples, the mean temperature is higher than in Britain, and in the other it is lower; so that the rapid and sudden growth of vegetation cannot be owing to high temperature; or the slow growth, and periods of unhealthiness, cannot be owing to low temperature. Dry air is the primary cause, or, at all events, the grand modifying circumstance in the one case, and humid air is the same in the other. We have already said that showers, however heavy and long continued, do not produce the deleterious effect, but that it is owing to continued moistness of the plants, and the infallible result, continual evaporation from their surfaces. But in the countries of heavy showers, alternating

with long seasons of drought, there is evaporation from the surface of plants, as well as in countries of the opposite character; but in the latter, there is evaporation all the year round, which keeps the plants at a comparatively low temperature; so that where heavy rains fall upon them for a period of considerable length, while the temperature is at the same time sinking, from the natural course of the season, the evaporation is greater, in proportion to the temperature, than in countries of tropical character. The result of this is, that when the temperature sinks, the deposition of water upon the plants, the evaporation, and the consequent cold, are all increased to a degree which chills the plants, to the serious injury of their health and growth, and still more of their flowering, if the rain, and consequent cold, come on when the plants are in progress to their floral development.

In summer, this change is never so great, nor is the heat sunk so low as to do serious injury to the hardy plants which grow and flower out of doors; and the tender exotics are, at the same time, safe in their greenhouses and stoves; so that during the summer there is very little to hurt either the growth or the bloom of any sort of flowers, except it be the difference of temperature between the day and the night; and though this be great, and the morning dew have abundant matter though it may not form abundantly, the radiation of heat from the ground, and the warm state of the surface of the plants, combines in preventing any serious injury. So also in winter, rain does no serious injury, except by washing some of the plants out of the ground, by occasioning floods, or, when it is accompanied by too high a temperature, starting the plants into a premature vegetation. The last of these is the most serious, especially if it occurs in the latter part of the winter, or in the spring; and in the last of these it is peculiarly injurious, because it is apt to bring on frost, or even to chill the young vegetation more than a moderate frost would do.

Thus, though there is no very great danger to vegetation, during the confirmed part either of the summer or of the winter—there being few or no out-door flowers at the latter season, there is great danger throughout the whole spring, which may be regarded as a blending together of the winter and summer. Still, however, this is only casual, in the very worst years; and in the favourable ones, which in this respect are the great majority, it does not occur at all.

Therefore, though a disastrous spring is the season at which injury, especially injury to flowers and tender leaves, appears to be the most unfortunate, yet such is not, in reality, the case; for there are many parts of plants that remain safe at this season, however unfavourable, which suffer, and often very severely, during other seasons, when the cause of severity appears to be much less. When, therefore, we look at the matter calmly and with knowledge, we necessarily arrive at the conclusion, that rain in autumn, if long continued, is the most disastrous to plants, whether they are in flower or no; and that the effect upon such as are not in flower, is to injure, if not altogether destroy their flowering in the ensuing season. There is another, and perhaps more serious evil. Greenhouses and other contrivances which protect tender plants from injury at other seasons, afford no protection against the autumnal rains; for on the contrary, plants in them suffer more than plants exposed to the open air. The reason is, though the greenhouse keeps out the cold of the other seasons of the year, it does not keep out the autumnal damp—the very enemy against which the cultivator has especially to guard. The protection of a stove is not a perfectly complete one here; and a greenhouse, in the case of very damp air, is about the worst place the plants can be in, especially if they be of kinds which, during this season, are in a state of very dry repose. Even if this is not the case, they suffer both in their leaves and in their stems; and if they, naturally, should be dry, the suffering is so severe as greatly to injure, and often to kill them. Shrubs which are naturally very dry during the season of rest, suffer the most from these rains. If they do not damp off, or are otherwise killed outright, they shed their leaves as if they were deciduous, or the stems become covered with small fungi, which destroy the action of the bark, and the plants linger in an unhealthy state, and often die at the last.

The shedding of the leaves is not so serious as this; but it generally causes the loss of a whole year's vegetation, and sometimes, though not very often, unless the stems are affected, kills the plants. In all cases, however, the reproductive energy is weakened, and the next bloom is never so fine as when the autumn passes away without any injury. This result has already taken place from the over-humidity of the past autumn; and it is to be feared that only a small portion of this evil has hitherto

been seen; but what has been palpable to the most common observer is enough to show the truth of what we have stated, and to make cultivators study the evil, and guard against it, by every means in their power.

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## BRACHYCOMA IBRIDIFOLIA.

WITH A FIGURE.

This genus belongs to the Linnean class and order *Syngenesia superflua;* to the natural order *Compositæ*, and second division of the third tribe, and first sub-tribe of that order. *Astereæ*, the sub-tribe, are plants with star-shaped flowers,—the genus under notice being, in its flowers, very like the common daisy; but different from that in its habit, being annual and shrubby, with a disposition to trail, or spread itself along the ground, and thus well adapted for beds or borders, where a low growth and a disposition to cover the ground are desired. It is a native of Australia, found in the Swan River colony, 1840. It grows in rocky places, the fleshy roots establishing themselves in the light mould which collects in the small hollows and fissures of the rocks; and thus it makes a pleasant addition to the summer ornaments of artificial rockwork; though it may also be grown in a bed or border, or in the green-house or windows. Excepting frost, it bears all the vicissitudes of weather in Britain; and as it is never exposed to frost, but when sown in autumn, in order to flower early in the spring; for ordinary cultivation, it may be treated in the same manner as the hardy annuals. The natural situations in which it grows, point out the soil in which it should be cultivated artificially. It should be a very light sandy loam, with a good drainage, so that the roots may not be over-moist at those seasons when the plant requires little or no water,—as over-watering is the chief danger to which the plants are liable, except too damp an atmosphere, which is equally injurious to them.

Plants early sown must be protected from frost while they are young; and from heavy rains at all times, unless that which answers to the rainy season in their country; and the season there

is not constant, there being sometimes two years without a drop of rain.

With due attention to these very simple directions, the plant may be grown in a bed or border, or in pots or vases. As a bed and border flower, it may be sown in March, April, or May; and thus the period of its flowering may be considerably lengthened by succession. When it is thus grown, however, the situation must be dry, the underground drainage complete, and the loam in which the seeds are immediately sown, light and loose, or otherwise the plant will not live.

If intended for early flowering, in the greenhouse or window, or even out of doors, it must be sown in the latter part of the season, and protected from the winter frost. For this purpose it should be sown in August or September, though it will do with later sowing than this. When thus grown in pots, these should be placed as near the glass as possible, during the winter months; for, though frost destroys it, it prefers rather a cool atmosphere with plenty of air. The seed should be sown in 48-sized pots; and the young plants should be thinned out to four or five in each pot, in order that they may have room to spread, as that is the state in which they make the finest appearance. The reason why they ought to have little heat or moisture during the winter months, even while in a state of young growth, is to avoid over-stimulating the roots, which would bring on an unhealthy growth, and destroy the whole plants.

If the directions we have given are observed, the plant is well worthy of culture, whether sown in the latter part of the season, for a greenhouse plant in winter and an early flowerer in the spring; or sown in the spring, so as to flower late in the summer or during the autumn. Both these periods may be considerably lengthened by sowing successions; and as the pause between the autumnal sowings and the early spring ones may be lessened, if not obliterated, the plant may be kept in continual flower, with the exception of three or four months in the winter.

When skilfully grown in a proper situation, this is a handsome plant—much more so than *Diversifolia*, which is inferior in habit, with the petals white; and though it has been eighteen years in Britain, it has never been held in much estimation. The eye only of *Ibridifolia* is white—the petals, or rather the marginal florets, being purplish blue, of a delicate shape. When the plants

have room to spread, they do not rise higher than from six inches to a foot; and then, as they are free flowerers, they are delicately handsome, and form a good contrast with various other annuals, both upright and spreading.

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## ON ANNUALS.

BY MR. R. PLANT, OF PADHOLME NURSERY, PETERBOROUGH.

As the present month is the commencement of the period in which it becomes necessary to provide for the embellishment of the flower garden, the choice of plants desired for that purpose should now occupy some attention. The plants most suited for additional aids to those which are hardy, or, as they may be called, regular inhabitants of the parterre, may be simply divided into two classes,—Greenhouse plants, and Annuals; the term greenhouse plants, including tender and half-hardy biennials and perennials, along with the suffruticose plants usually employed for turning out. Now, though this class of plants has very great claims upon our notice, yet the importance of annuals must be universally acknowledged to be paramount,—supplying us, as they do, with such a profusion of varied and beautiful objects of admiration, from the earliest period of solar influence, till the last rays of an October sun are lost in the frost and fogs of November. Hence it will be seen that the selection and proper disposition of annuals is a matter requiring as much of our consideration as any part of Floriculture; and as the disposition of plants generally, and more particularly as regards their colours, has been already spoken of in the Florist's Journal, I will now confine myself to the choice; and this the more readily, as there are many persons who take much pleasure in their flower gardens, and who may not have the advantage of glass for the protection of plants during winter, or their propagation in spring. To such, annuals are of the first consequence; and with some of them, perhaps, a few words on the subject may find favour.

The manner in which I shall, probably, be best understood with respect to the choice of annuals, will be to divide them into their natural classes; viz.—hardy, half-hardy, and tender; saying a few words on the proper method of growing them, and adding a

selected list of the best kinds in each class. In order to do which I commence with

*Hardy Annuals.*—These, for an early bloom, should be sown about the last week in February, in the places in which they are to remain, sowing rather more than will be required in each place, the superfluous plants to be transplanted, as soon as large enough; and for a regular succession, another sowing should be made in March, in the same manner; and a third in April, or the early part of May. Transplanting a few, from each sowing, produces a very regular supply of flowers; as those which are removed, bloom about ten days or a fortnight later than those which remain where sown; and, consequently, remain in flower about that time longer, or after the others, and are succeeded by those sown a month later. The best of them are—

| | Height, in Ft. | Colour. |
|---|---|---|
| Adonis æstivalis | 1 | scarlet. |
| Anoda Dilleniana | 1½ | blue. |
| Argemone Hunnemannia | 2 | yellow. |
| speciosa | 2 | ditto. |
| Mexicana | 2 | ditto. |
| Bartonia aurea | 2 | ditto. |
| Calendrinia speciosa | 1 | drk pink. |
| discolor | 2 | rose. |
| grandiflora | 1½ | purple. |
| Calendula pluvialis (Cape marigold) | 1 | light do. |
| stellata (Cape marigold) | 1 | orange. |
| officinalis (Cape marigold) | 1 | double. |
| Campanula pentagonia | 1 | blue. |
| alba | 1 | white. |
| Lorei | 1 | blue. |
| alba | 1 | white |
| Celsia cretica | 5 | yellow. |
| orientalis | 1½ | ditto. |
| Clarkia pulchella | 1½ | rose. |
| alba | 1½ | ditto. |
| elegans | 2 | lilac. |
| rosea | 3 | rose. |
| grandiflora | 1½ | drk rose. |
| Chrysanthemum speciosum | 1 | yellow. |
| new golden | 1 | ditto. |
| tricolor | 1½ | |
| Centaurea depressa | 1 | red. |
| cyanus | 2 | var. |
| Collinsia bicolor | 1½ | wh&pink. |
| grandiflora | 1 | purple. |
| Cuphea Silenoides | 1½ | ditto. |
| procumbens | 1 | ditto. |
| Delphinium, or Larkspur, in varieties. | | |
| Erysimum Perowskianum | 2 | orange. |
| Eucaridium concinnum | 1 | purple. |
| Eutoca viscida | 1½ | blue. |
| Wrangeliana | 1 | violet. |

| | Height, in Ft. | Colour. |
|---|---|---|
| Eutoca Menaiesii | 1 | pink. |
| Goodetia bifrons | 1 | crimson. |
| Lindleyana | 1 | wh & rose. |
| rubicunda | 1½ | purple. |
| concinna | ½ | reddish. |
| rosea alba | 1 | rose & wh. |
| tenuifolia | 1 | purple. |
| Kaulfussia amelloides | ½ | blue. |
| Lasthenia Californica | 1½ | yellow. |
| Lathyrus azureus | 3 | blue. |
| odoratus (or Sweet Pea, in var.) | 4 | var. |
| Lupinus nanus | 1 | blue. |
| Cruickshankii | 3 | var. |
| Hartwegii (and Lupines, in var.) | 2 | blue& wh. |
| Leptosiphon densiflora | ¾ | wh&pink. |
| androsaceus | ¾ | ditto. |
| Lavatera, var. | 3 | wh & red. |
| Nemophila insignis | ½ | blue. |
| atomaria | ½ | white. |
| Platystemon Californicum | 1 | yellow. |
| Papaver somniferum, or Poppy, in var. | | |
| Prismatocarpus speculus | 1 | blue. |
| Tropeolum Shillingii | 6 | spotted. |
| majus atrosanguineum | 6 | dark red. |
| Tolpis barbata | 1 | yellow. |
| alba | 1 | white. |
| Tagetes, or Marigold, in var. | | |
| Xeranthemum annuum | 1½ | purple. |
| album | 1½ | white. |
| Zolgea Leptaurea | 1 | yellow. |

*Half-hardy Annuals* are those which require some slight artificial protection, when sown early. Many of those included in

the above list were considered half-hardy till within the last few years, when superior cultivation proved them to be perfectly hardy, as regards the generality of situations, though even now, in some situations that are naturally cold and wet, they should have a little protection, if sown early in February; while, on the contrary, those generally considered only half-hardy will succeed perfectly well when sown in spots congenial to their growth, in the open air. The first sowing should be made in March, either in slight hot-beds or under hand-glasses, on the open borders. If hot-beds are used, the dung should be well shaken and incorporated when the bed is made, and the lights kept closely shut, for a few days, to draw off the first violent heat; some fine well-rotted leaf mould, or other light soil, should be then spread over the bed, to the depth of about six inches: sow on it, and cover the seed very slightly; water them gently, when requisite; and give air as soon as the plants begin to appear, increasing it by degrees, till, by the time they are two or three inches high, they will bear full exposure to the sun and air; then, immediately after a shower, transplant them to the places they were intended to fill; give them water here till they are established. The same treatment should be observed, if sown under hand-glasses. The successional sowings should be made in April, May, and in June, if there is much space to fill, or the flowers desired very late; though in the latter sowings no protection is necessary. The principal half-hardy annuals are—

| | Height, in Ft. | Colour. |
|---|---|---|
| Alonsoa grandiflora | 1 | scarlet. |
| Ageratum odoratum | 2 | blue. |
| Mexicanum | 2 | ditto. |
| Cacalia coccinea | 1 | scarlet. |
| aurea nova | 1 | orange. |
| Calliopsis atrosanguinea | 2 | deep red. |
| semi plena | 2 | yel. & red. |
| Drummondii | 2 | ditto. |
| Cleome pentaphylla | 2 | rose. |
| Callichroa platyglossa | 1 | yellow. |
| Clintonia elegans | 1 | wh&blue. |
| pulchella | 1½ | ditto. |
| Cosmea bipinnata | 2 | purple. |
| sulphurea | 2 | sulphur. |
| Datura cerato caule | 3 | wh&lilac. |
| fastuosa | 2 | purple. |
| alba | 2 | white. |
| Helichrysum bracteatum | 2 | yellow. |
| var. album | 2 | white. |
| var. compositum | 2 | ditto. |
| macranthum | 2 | ditto. |
| Humea elegans | 6 | red. |
| Hibiscus Africanus | 2 | wh&blck. |
| Trionum | 1½ | ditto. |

| | Height, in Ft. | Colour. |
|---|---|---|
| Hibiscus Richardsoni | 2 | yel&blck. |
| Ipomea rubro cerulea | 20 | blue. |
| Quamoclit | 5 | scarlet. |
| convolvoliflora | 10 | blue. |
| Dillenii | 10 | ditto. |
| Ipomea Michauxii | 10 | striped. |
| nil | 10 | blue. |
| purpurea | 10 | purple. |
| Ipomopsis picta | 2 | scarlet. |
| elegans | 2 | ditto. |
| Nolana prostrata | ½ | violet. |
| atriplicifolia | ½ | blue. |
| Merembergia intermedia | 1 | dk velvet. |
| calycina | 1½ | white. |
| Petunia phœnicea | 3 | purple. |
| nyctaginiflora | 3 | white. |
| violacea, and var. | 3 | var. |
| Phlox Drummondii | 2 | purple. |
| Rhodanthe Manglesii | 1½ | rose. |
| Sanvitalia procumbens | ½ | yellow. |
| Salpiglossis picta, and var. | 2 | var. |
| Schizanthus pinnatus | 2 | lilac & pk. |
| Grahamii | 3 | lilac & yel. |
| humilis | 1 | do. do. |

| | Height, in Ft. | Colour. |
|---|---|---|
| Schizanthus retusus | 3 | crim & yl. |
| Hookeri | 3 | pink & do. |
| Schizopetalum Walkeri | 1 | white. |
| Senecio atropurpurea | 2 | purple. |
| alba plena | 2 | white. |
| Scabiosa grandiflora | 4 | purple. |
| Sphænogyne speciosa | 2 | yellow. |
| Trachemene cerulea | 3 | blue. |
| Zinnia elegans, in var. | 2 | var. |
| With Stocks and Asters, in var. | | |

The above list comprises all the best half-hardy annuals at present known to us.

The *Tender Annuals,* requiring rather a more varied treatment, I will reserve for next month's Journal.

R. P.

## THE WEATHER FOR JANUARY.

In that month there have been several characters of weather. The early part being continued frost, with a tranquil atmosphere; a smaller portion of the middle, alternations of frost and thaw, with the atmosphere but little disturbed; and toward the latter part, frost, snow, sleet, and occasional short periods of thaw, with considerably more atmospheric disturbance. There has, however, been comparatively little rain; and upon the whole, the month has been seasonable, and not unfavourable to the health of plants. There has been no heat to stimulate the roots to premature action, nor has there been any additional quantity of water calculated to soak and rot them. In the earlier part of the season there was abundance of water calculated to have this effect, if the plants had been in a state of complete repose; but as the growth ceased very gradually, and the winter rest was in consequence thrown back late into the season, the frost set in before much injury was done; and as that frost was not so severe as to injure any but the most delicate plants, we may conclude that, unless there is something particularly adverse in the ensuing spring, the coming season will be rather a favourable one for bed and border flowers. With greenhouse plants, and especially with hard-wooded shrubs, the case will be different; for many of them were weakened by the rains in the preceding months. January is, however, the season of most complete repose in plants, and, therefore, the conclusions to be drawn from its character are comparatively few.

## CALENDAR FOR FEBRUARY.

The busy season of the gardener is now near the commencement, and much of the success of the ensuing summer depends on expediting all operations that occur during this and the next month. It frequently happens that owing to the untoward weather in the winter and early spring months, many out-door operations remain undone; yet the cultivator must be careful, lest, in his anxiety to forward such work, he get upon the ground too soon; for ground which is naturally of a retentive quality is much injured by working in a wet state. It is in this that light soils have the advantage. Let him rather, in such cases, forward, by all possible means, all in-door work, that

there be no delay when a fit opportunity presents of recommencing out of doors.

STOVE.—Some of the plants here will require repotting, in doing which care must be taken to secure to each a good drainage; a few others, spring-flowering plants, will want a fresh surface-dressing. The most desirable kinds may be propagated now, with considerable success. A few Cacti may be forwarded for an early bloom; also Amaryllis, and other Cape bulbs, though the principal portion should still be kept dry. Continue to bring in Roses, Lilacs, Rhododendrons, Kalmias, and other shrubs; and among the bulbous-rooted plants, Hyacinths, Van Tholl Tulips, Narcissus, and a few plants of Cyclamen, in sorts. At the earliest appearance of insects, fumigate the house thoroughly; this should be done when the plants are dry. Let the temperature range between 60° and 70°. Give the plants an occasional syringing over head, as it keeps them clean, and is conducive to their general health.

GREEN-HOUSE.—The latter end of this month is the best time for a general re-potting. Here Geraniums, Salvias, Fuchsias, and other free-growing plants should be done first, reserving the spring-flowering kinds till they have done blooming; as also hard-wooded trees and shrubs. Camellias must be liberally supplied with water, and kept in a cool, airy situation. Chrysanthemums may be placed in an open shed, as they go out of flower. Annuals, in flower, should have plenty of light; air should be admitted, on every favourable occasion, to prevent the plants becoming drawn. Every means should be used to destroy insects on their first appearance, as they increase with amazing rapidity at this season; the best way is to smoke the house with tobacco, when the plants are dry; for if done when they are wet, many of the insects are enveloped in water, and the smoke, consequently, has no effect on them. Prune and tie climbers; suffer none to attain a rambling growth. Keep the house and every thing about it as clean as possible. Propagate Verbenas, and all other plants required for turning out. Renew the earth in the borders of the house. Hyacinths, Van Tholl and Double Tournesol Tulips, Narcissus, and other bulbs, may now be brought here to produce their blooms. Where the advantage of a stove is not to be had, keep the temperature between 45° and 50°. Occasional fire-heat is necessary, both to expel frost and damp.

FLOWER GARDEN.—Re-pot and top-dress Auriculas, Polyanthuses, &c. if not done last month. Piccottees and Carnations should be placed in the blooming-pots, by the end of this month. Plant out Pansies, Pinks, &c. as soon as the ground is ready to receive them. Sow Dahlia seed, in heat; also a few Balsams, Cockscombs, Amaranthus, and other tender annuals. The present is the best month for planting Anemones and Ranunculus. Proceed with the propagation of Dahlias. Plant out all hardy, herbaceous, and biennial roots that may be in reserve. Sow Auricula seed, in pans or pots, and place them in a gentle heat. Prune and plant Roses and other shrubs. Proceed with all alterations, with celerity; continue to protect tender trees and shrubs; finish digging flower-beds, as soon as possible; let the gravel-walks and lawn be well rolled, as it prevents moss and worm casts.





Engd by Alfred Addard.

ONCIDUM PAPILIO.

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THE

# FLORIST'S JOURNAL.

MARCH 1, 1842.

## THE ONCIDIUM PAPILIO—THE BUTTERFLY PLANT.

BY MR. P. N. DON.

THIS is a very large genus, and many varieties are very beautiful; but that here figured is one of the most singular and beautiful of the genus, the flower in every part resembling a butterfly, on long slender flower-stems, and, when the flower is moved by the air, has the appearance of the insect on the wing. The sepals and petals are green, striped with reddish brown; the lip is pale yellow in the middle, with a broad margin of reddish brown; the upper portion is of a green-white, spotted with reddish brown; the tubercle on the lip has the appearance of a lamb's head beautifully spotted with brown; the apex of the lip is broad, obtuse, and emarginate, and the middle portion is somewhat narrow; the base is broader than the middle portion, and winged. The column is short, of a brownish green, and resembling the mouth of an insect, the cap forming the head portion, fringed underneath with two peduncu-lated glands, which are black, and very much resemble the palpæ of an insect; the two lateral sepals are somewhat ovate-pointed, green, striped with reddish brown; the upper sepal is linear-pointed, of a reddish brown, with a green keel on the outer side; the three upper petals are linear-pointed, of a reddish brown, with a greenish ridge along the whole length of the petals; underneath the cap are to be seen the pollen masses, which are of a yellowish colour; these are the stamens, and underneath them is the style: a thin membrane divides the anthers from the style. When the pollen is ready to burst, the anthers have the power of throwing themselves forward; when forcibly touched, they are

thrown out altogether; but when touched gently, the anthers will sometimes be thrown into the hollow style, and they are furnished with some glutinous matter at the base, which causes them to adhere to the stigma, or to any thing which they may chance to fall upon. The pseudo-bulb is compressed on both sides, and of a reddish brown; the leaves are ovate acuminated, green, beautifully mottled with a reddish brown, both on the upper and under side. This species flowers at various seasons; but the Spring season is the time when it flowers the finest, and when the flowers are largest. The mode of treatment of this species, as well as the whole genus, has been given in the Florist's Journal for 1841.

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## CULTURE OF THE AURICULA.

In the culture of this most beautiful and highly bred flower there are three principal points which claim our attention: first, the soil or compost in which it is grown; secondly, the different modes of propagating it, or obtaining new plants; and thirdly, the general treatment of it at the different seasons of the year, and under varieties of soil and climate.

*Soil or Compost,*—the first of these, is the only one over which man has complete control; for the propagation, almost exclusively, and the cultivation, to a very great extent, are dependent upon nature. A florist may grow, or at all events attempt to grow, Auriculas in any soil or compost that he pleases; but they will not succeed equally well in all; nor is it at all easy to say what is the specific difference of soil or compost that occasions a difference either of growth or of flowering. The atmosphere and the water which it holds in solution, and probably also differences of its electrical state, have an influence upon the growth of plants and the blooming of flowers, though the difference of these circumstances is often so fine, that we are not able to allege any thing of it with absolute certainty.

Hence, in those parts of the treatment of flowers which are most under the control of the cultivator, that cultivator is very apt to fall into quackery, and he is the more apt to do so in highly cultivated plants, because they are the most liable to be ruined by

small, and not very obvious causes. The Auricula is just such a plant. It is highly bred, and exceedingly prone to break into varieties; and the soil in which it is grown being the circumstance connected with its growth over which man has the greatest control, it necessarily follows that more quackery is exercised here than in any thing else connected with its culture; among the older cultivators especially, who are still in the rear, and who mistake trial for experience, and consider their own practice the very best in the world. Soils or composts in which Auriculas may be successfully grown, are very numerous; and though many of them are in all probability much the same in their effects, every cultivator thinks his own the very best, and cherishes it as a treasure whereof he has the exclusive possession.

A very intelligent grower of our acquaintance, not an Auricula fancier, certainly, nor a fancier of any particular flower, but a general cultivator, who understands all flowers, and good means—if not the very best means—of treating them, is of opinion, that a few single and simple substances, whereof neither the cost nor the labour bears any proportion to those of such as are commonly in use, are all that is necessary. What he recommends is a compost, consisting in great part of rich light yellow loam, mixed with a due proportion of leaf-mould, of which he prefers beech leaves in a state of partial decomposition, together with some of the small twigs; to this he adds a small portion of clean sharp sand,—sea sand, if he can get it, and if not, river sand,—or better, run sand from the channels of small streams, but pit sand, of any description, is bad. This compost is to be kept for not shorter time than twelve months, and the longer the better; and it is to be frequently turned, but not reduced to a smaller consistency than it is of naturally, excepting so far as that may be produced by the act of turning it over. This compost bears a very considerable resemblance to the soil in which the plant grows naturally. Richer composts, or composts consisting of a greater number of ingredients, are also recommended; and many recommend two composts—a poorer one for common growth, and a richer one for top-dressing. Instead of the leaf-mould, or along with it, the litter of sheep-cotes, consisting of chopped and half decomposed hay with droppings of the sheep, is also used; and the richer composts have an admixture of the droppings of poultry, blood, sugar bakers' scum, and other matters.

But these rich substances are kept until all fermentation is over, and they are reduced to a dry powder, which is also the case with night soil, where that is employed. The length of time that these naturally rich manures are kept, and the thorough drying, probably reduce them to so mild a state, that they have not more stimulating effect than the leaf-mould; and therefore, how different soever the composts may be in name, they are all pretty nearly alike in real composition and effect upon the plants; and as was said of one of them, it may be said of all, that they bear a very great resemblance to the natural soil. This is a fact worthy of attention, when we take into consideration the many varieties of Auriculas, especially in colour; for it shows that the greatest possible change of colour may be brought about by a very slight alteration of the compost or soil in which the plant is grown. Difference of colour is, however, the main change produced by cultivation in the Auricula; for there is but little alteration in shape; and the five stamens in the eye of the flower have never been changed into petals, at least, in any well authenticated instance that has come under our notice. But if a change of form, such as turning the stamens wholly or partially into petals, or a throwing of the accumulated substance upon any part where it is not found at all naturally, or if found, not in great abundance, the result is generally brought about by the operation of a richer manure, and one in a state of at least partial decomposition. The colour may change along with these greater changes of the plant; but they may also occur without that being the case. The Dahlia affords an instance, in which both the form and the colour are greatly changed by artificial treatment, although that treatment is not very rich; and the potatoe and common turnip are two instances out of many, in which, by the application of a richer manure, the form is changed without any great change of colour; and in both of these last named instances, the change is produced, not in the flower, but in other parts, namely, the tubers of the potatoe and the bulb of the turnip.

This shows us that if we wish to improve the flower of any plant, as for instance of the Auricula, the plan we must pursue ought to be something different from the operation of a richer soil, and more stimulating manures. The instances which we have given—and they are but one or two out of very many—furnish evidence that more stimulating soil and manure, though they act

upon the individual system of the plant, and make its vegetative powers elaborate an increased quantity of matter, do not increase the fertility or the beauty of the flower in the same ratio, but rather the reverse. In the Auricula, it is to an improvement of the flower only that the attention of Florists is directed. The grass, the main stem, and the peduncles, ought to be in keeping with each other, and adequate to the support of the florets in the most graceful manner; but still, none of these parts must be in excess, such as results from the use of a highly stimulating manure, but they should always be subordinate to the truss of florets as the principal part. For this reason, we are very much inclined to coincide in opinion with the friend to whom we have alluded, in considering the loam, the leaf-mould, or other decaying vegetable matter, and the sharp sand, as constituting the essentials of a proper soil for Auriculas, and all the additions as merely superfluous, unless in so far as they may conduce to the general health of the plants, and keep them alive under circumstances to which they would otherwise give way.

But notwithstanding this opinion, and the sure foundation upon which it appears to be grounded, we shall mention one or two of the composts that have been used and recommended by eminent growers.

Mr. Hogg of Paddington, who, though not an express and avowed Auricula fancier, was eminently successful, and successful upon sound principles and well authenticated practice, in most of the choicer Florist's flowers, recommends rather a simple compost for regular growth, and a richer one for top-dressing, both of which had been used with eminent success by Matthew Kenny and other celebrated growers. This consisted of sound loam, of a somewhat sandy nature, as the staple of the compost. To this were added sheep's dung and hog litter, and a quantity of sharp sand, if the loam itself did not contain enough of that ingredient. The loam was kept for some time, and the heap frequently turned; and the other ingredient was never used until it had been kept for at least eighteen months, and carefully worked and turned during that time. From what was formerly said, it will be seen that this compost had a very great resemblance to the native soil of the Auricula upon the Alps. The richer ingredients were sheep's blood, and the dung of poultry, which were also kept for some time after all fermentation in them had ceased, and then mixed with the

staple ingredients for the top-dressing. From the length of time that these and all the more stimulating manures are kept, before they are mixed in the compost, it is highly probable that all their more energetic qualities are exhausted, and that, whatever they may have been originally, when mixed with the compost they differ very little from ordinary vegetable moulds. Thus it appears that the energetic properties which the names would lead one to suppose are added to the compost by these ingredients, are, in great part at least destroyed during the time that elapses before they are applied to the plants.

Mr. Emmerton also recommends several composts, resembling that most approved of by Mr. Hogg, but containing a greater number of substances; which substances must, however, be brought nearly to the state of decomposed vegetable matter, before being applied to the plants. The staple ingredient in Mr. Emmerton's favourite compost was a mixture of blood and goose-dung, kept in a pit until it acquired the proper consistency, and then mixed with sugar-bakers' scum, and fine sandy loam. What effect this compost had upon the flowers of the Auriculas is not mentioned; but Mr. Emmerton remarks that the leaves were very fine and vigorous in their growth, which is exactly the result that might be expected from the use of a soil much richer than the natural one.

Besides those which we have mentioned, many composts for the successful growth of the Auricula have been published, and a far greater number have been acted upon. The fact is, that the perfect uselessness of many of the ingredients has been the cause of such a variety of composts. If the loam and sand, or sand, blood, and the decomposed vegetable matters which form the grand staple, are of the right kind, and in sufficient quantity and proportion, it matters little what the minor ingredients may be, if they are not absolutely deleterious. This is the chief reason why the composts recommended for Auriculas are so numerous, and why so many of them all answer the same purpose equally well.

*Propagation.*—As is the case with many flowers, there are two methods of propagating or increasing the number of Auricula plants—by offsets taken from the mother plant, and by sowing the seeds. Each of these in so far serves a different purpose in most cultivated plants; but the difference of purpose is perhaps

greater in the Auricula than in most others. The offset is always a fac-simile of the mother plant; and therefore, when a choice variety has been once obtained, it is kept up in perfection by offsets. Sowing the seeds is an uncertain operation in this respect. Even when growing wild on its native hills, there are many varieties of colour; and as varieties of colour are the principal changes obtained, even by the highest cultivation, the more attention that is paid to the growth of the plants, the varieties of colour are more numerous. If any one variety is wished from seeds, the plants that are to produce the seeds must be placed at a distance from every other variety; and if a cross of two is sought, only these two must be left near each other; but if the trial be for varieties entirely new, then a number of varieties must be allowed to run to seed in the same bed; and the experimenter must take his chance of what may turn up. The seedlings may be worse than the best plants producing the seeds; but out of a great number, some original and good varieties may be expected, though probably not more than one or two in a hundred seedlings.

In order to obtain offsets of the most vigorous growth, and at the same time secure a fine bloom of the mother plant, it is necessary to thin out the offsets not wanted early in the season, and about the same time that the flowering-stems are reduced to a single truss. If either offsets or trusses prove to be numerous, they weaken the mother plant, and also each other, and the same holds with regard to the number of florets in a truss. Thinning out any of the three, throws the vegetable action of the removed one upon some other part of the plant; as, for instance, the action of removed offsets is thrown into the general system, that of removed trusses into the flowering system generally, and that of removed florets into such as are allowed to remain. By knowing this, and paying strict attention to it, an Auricula may be cultivated to the express promoting of a number of purposes. If great vigour in the individual plant is required, the offsets must be removed early in the season, and before they have drained much of the substance of the mother plant; but if, on the other hand, the growth and flowering of the mother plant are matters of indifference, and the grand object is to multiply the plant by healthy suckers, these may be left on until the plant should have done flowering, if that appear to be at all necessary for their

perfection, which it is in every case where the rapid bringing forward of vigorous new plants is important for the supply of the market. For this, and all cases which are in any way connected with the vegetable growth of one part of a plant, and the stunted growth of another, the reverse of any particular mode of treatment always has an opposite effect; as, for instance, the opposite treatment to that which produces healthy flowers in a limited number, will abundantly produce flowers that are unhealthy, or at all events less vigorous than they are in the other case. If very strong and healthy offsets are the object, their number must be reduced, and they must be left longer upon the parent plant; sometimes until the flowering of that is over; but if superior growth and flowering of the mother plant are the objects, as is the case when intended for exhibition, the offsets must be got rid of as soon as possible, at the sacrifice of even one or all of their number upon the exhibition plant. In some instances the offsets may be taken off as early as February, or before the vigorous growth for the season comes on; and in other cases they may be left on the mother plant until August, when the vigorous growth for the year is over; but the success and health of the seedlings render it desirable that they should be taken off during a pause, or at all events a diminished action of the plant from which they are taken. If this is not attended to, many of the seedlings may be lost, and the mother plant injured by bleeding, without any compensating advantage.

The removal of the offsets can seldom be well accomplished without taking the plants out of the pots, so as to obtain a well-separated portion of the old root along with the offset; and if this portion has fibres to it, so much the better. These circumstances render it at once an independent plant, of which the first planting is analogous to the transplanting of a seedling.

The suckers of Auriculas are always firmly attached to the mother root; and, therefore, in the case of a plant which it is desirable to multiply in this way as much as possible, the best plan is to divide the root longitudinally with a fine-edged knife, so that each division may have upon it as many uninjured fibres as possible: and though the use of the knife may not be absolutely necessary, the removal of the mother plant may be required in order to ascertain whether it is so or not; and the knife is always necessary when the suckers cannot be got off without injuring the

fibres. When the offsets are removed, they are to be planted in 48-pots; that is, about 5 inches at top, 3½ at bottom, and 4 to 5 in depth. This gives the side of the pot a good slope, against which the offsets are planted, and a drainage secured by a hole in the bottom 1¼ to 1½ in diameter: this to be covered with an oyster-shell, with a piece of shell or curved pot along the side for an under drain. This will prevent water from stagnating so as to injure the roots, at the same time that it may be given in small quantities as the plants require. After potting the offsets, the fibres of the mother plant are to be trimmed, and it repotted in the same pot from which it was taken, the difference of soil in its pot being made up of the pots of the offsets filled with the ordinary composition. By attending to these simple directions, a choice variety of Auriculas may be multiplied very speedily and in fine specimens; but every part of the operation requires attention and neat-handedness.

When placed in the pots, all the plants should have a gentle watering; but they should never be placed under a drip, especially the drip of trees, as that is very apt to rot them; neither should offsets be removed later in the season than the month of August, as by that time all action in the plants has ceased for the season, and the offsets are apt to be so injured during the winter, by not having any hold of the ground, that they do not react in the spring, and are of course lost. If they once have a hold on the ground, moderate frost does not injure them, until they are in flowering growth in the spring; but water in November and December is always injurious. This is in accordance with the situation of the Auricula on its native Alps, especially in high situations. There, the snow comes down before there is much autumnal frost or rain, and as the ground under snow is never below 32° and sometimes higher, the limit of the winter cold is determined, and no wind beats upon the plant during that season.

In obtaining seed for the Auricula, some attention must be paid to the varieties of plants, and also to their age, and other circumstances upon which free and abundant flowering depends. From one single variety—for notwithstanding the natural differences of colour, it does not appear that there are more—the Auricula has produced more abundant, and, at least in so far as colour is concerned, more subvarieties than almost any other plant. Notwithstanding this, it is not so easily treated by cross impregnation, as

many other plants of which the subvarieties are fewer. The anthers never stand above the level of the circle which surrounds the eye, and therefore the pollen masses cannot be removed without difficulty, and seldom without injury. The pollen tubes, through which the energy of the pollen is transmitted to the ovary, or seed vessel, must also retain their principle of association for a comparatively short time ; and this, with the other circumstances, tends to defeat the process of cross impregnation. Hence, the breeder of these plants from seed, must chiefly depend on natural crosses for his subvarieties, and in order that he may have the greater chance of success, he must be very careful in the selection of his breeding plants. Even with all his care, he has difficulties to encounter; for the natural disposition to sport colour is so great, that the seedling has often very little resemblance to either parent. Still, he must do the best he can, which is to select healthy plants of choicé sorts from which to procure seeds, and keep those plants as much out of harm's way as possible, by removing them to a distance from all inferior ones. Young and healthy plants are the best from which to obtain seed, though the seed is not so abundant as in older ones. The colour of the floret during the whole time of its bloom, is also a point worthy of attention, in showing which flowers will maintain their colours through a cross, and which will not. If the plant remains steadily of the same tint of colour until the florets begin to fade, at which time the remains of them should be removed from the seeding florets, the plant is said, in the language of Florists, "to die well," and if it does this, it will retain its colour through a cross impregnation; but if, as the petals begin to fade, the colours also begin to change, the plant is said to "die ill," and the probability is that it will give way in the cross impregnation. It is generally understood that flowers having the edge, or principal breadth of the floret, of a dark red purple "die well," while those that have it dark blue purple "die ill." This is not universal; and probably it depends on the energies of the other subvarieties with which the cross impregnations take place ; but still, it is a maxim with the Florist that the dark blue purple is not to be confidently relied on.

This would open up a very curious question in the rationale of the growth of flowers, and the changes effected in their colour, whether more artificial or natural: but this is a topic upon which

we cannot enter, unless in a separate paper, of which it shall form the principal subject, and where its leading gradations can be worked out with such breadth as to make them intelligible. As the seeds ripen, they should be removed in their pods, and kept in these, in a dry situation, until the time of sowing,—each packet arising from the same parent, or combination of parents, being marked on the paper containing it; as this will not only enable the Florist to distinguish the different sorts, but also let him see the effect that results from each cross.

*Management.*—In treating of this branch of the subject, the sowing of the seeds is the first operation in the course of nature, though it may not be in that of the year. The time of sowing depends upon the situation in which the seeds are sown. If they are under shelter, this should not be later than the 1st of March; and in that case, the plants may be expected to come vigorously into bloom in the following spring. If to be sheltered, the seeds ought to be sown in wide-topped 24-pots, with the surface finely sifted, and the earth over them less than a sixteenth part of an inch thick, and it should be patted down smoothly, and not much compressed. Seeds out of doors should be placed in similar pots, and protected from the rain by glasses; but both should have abundance of air as occasion requires. When the seedlings have attained such size as that they can bear to be handled, they should be potted around the sides of the pots of which the seedlings are grown; and as soon as the latter are able to bear it, they should be transferred into wide-mouthed pots of the 48 size; and when they have arrived at this size, they are to be considered as plants, and treated as such. The time during which the old plants are flowering, is that in which the offsets, if early put in, and the seedlings, are establishing their growth; and plenty of air, and moderate and gentle waterings from a syringe or the fine nose of a watering pot, should be given to them, if the natural rains are not frequent and gentle enough. When chance of temperature below freezing is over, the plants should be allowed more direct communication with the open air. In respect of growth, their exposure is of minor importance; but not so with regard to the colours of the flowers; for though the plants themselves love a free exposure in every respect, the colours suffer from the direct influence of the hot sun. They like the morning sun, especially while coming into the season of

flowering, and therefore an eastern aspect is then the proper situation for them; but when the flowers approach maturity, the hot sun, come in what direction its rays may, is always injurious; and for this reason a north aspect is always the best. Some attention is also required in the early part of the flowering season—this answering to that during which, in its native locality, the plant has the protection of the snow. During this period, a common frame is not enough for the security of the finer sorts, and they must have the protection of more than one mat over the glass, in order to make them perfectly safe. At the same time they must never be without an abundant supply of air; and if the temperature rises considerably above the freezing point, this supply of air must be abundant, otherwise the stems will be drawn up weakly and feeble, and the whole plants will have a sickly appearance. There is a good deal of difficulty—at least of nicety—attending this spring management; and according to it, the flowering will be superior or the reverse. It is, however, an operation of so much nicety, that no written directions can include the whole of it; and therefore much must be left to the observation, taste, and discriminating power of the cultivator. Hence, though there is only one leading variety of the Auricula, and though that variety is a hardy plant, capable at least of enduring the severest climate of any part of Britain, yet its successful culture, and the keeping up of the choicer varieties, require more attention than plants of the most delicate tropical character.

It can at no season get too much air; but the waterings should be gentle at all seasons, and very little water is required after the time of flowering, except in the case of offsets, seedlings, and transplanted flowers; and even to these the waterings should be gentle and moderate. In their native localities, the plants have very little water, from the time at which the flowering is over, to that at which the snow falls and covers them with a protecting mantle till the spring; and we must imitate those circumstances, in so far as they can be imitated with our different climate and an artificial treatment. Especial care should be taken that the plants are never chilled by watering, which is most likely to be the case in their natural season of repose.

There are many other circumstances connected with these lovely plants, which are worthy of attention; but we must defer these to another opportunity, if such shall occur. CONDUCTOR.

## EUPHORBIA JACQUINIFLORA.

Sir,—It may seem out of place to call the attention of your readers to the culture of the Euphorbia Jacquiniflora at this time, when its beauties for the season are over; but, in my opinion, it is the season when most attention should be bestowed upon it. In every plant there is a period of its existence in which it will have repose, or rest, the same as in the animal kingdom. In that kingdom some require repose at short intervals, and some at much longer ones; it is the same in the vegetable creation, although involved in greater obscurity; but the more we study the nature of the plant, the more able shall we be to know the seasons in those plants which are imperceptible to our senses, and more successful shall we be in their cultivation. In few plants that I know of, is their season of rest so easily observed as the Euphorbia Jacquiniflora. When the plant is done flowering, which is usually about the latter end of February, it seems almost dead, and will continue in that state for two or three weeks, do with it what we will; and, strange too, at that season of the year when mostly all other plants are in a vigorous growing state. It may be urged on by watering and placing it in a moist heat, but the effort in most cases will cause its death. I have made these few remarks in order to call the attention of your readers, who may not have observed it to the extent that it ought to be in the culture of all sorts of plants. Having been rather successful in growing the Euphorbia, I will here give the method I adopt. When it is done flowering, I stop giving water, and place it in the coldest part of the stove. I let it remain there about six or eight weeks; if the mould in that time should appear too dry, I water occasionally the outside of the pot, which, owing to its porous nature, absorbs a quantity of water, which finds its way into the soil and roots, keeping them a little moist. If we cut a piece of wood, previous to withholding the water, there will be but very little of its milky-like sap exude from the wound, although there is plenty of moisture in the soil; but if we cut it again, after standing dry for six weeks, the sap will come in greater abundance than before; in my opinion, showing, in a very striking manner, the necessity of plants having a period of repose, and likewise the advantage that will be thus derived in their future culture.

When the repose is over, the buds will begin to swell a little; I then take the plant out of the pot, and shake nearly all the soil away from the roots. From a 12-size pot, I have reduced it to a 32, but this reducing must be regulated according to the state of the plant; and, therefore, I leave it to the judgment of the grower. When I shake the soil from the roots, I cut them back a little; at that time they will be setting out small fibres, which will soon take hold of the new soil. I use one part of light turfy loam, and three parts of turfy peat, adding a little silver sand if the peat seems deficient in that ingredient, and always securing proper drainage to the pot. If it is an old plant that has been cut down formerly, I cut it back, leaving three buds on each shoot of last year's wood; if it is a young plant, that was struck from a cutting last year, I leave four or five buds, (that is, only in plants that have been struck in the autumn for late flowering;) but in those plants that I strike from the wood which is cut off in the spring, I keep stopping the leading shoots throughout the summer, in order to have plenty of shoots for specimen plants the following year, and those are always the handsomest plants that are so treated. After shaking the soil from them, and potting them, I place them in a partially shaded place in the stove, keeping them always in a humid atmosphere; if there is not enough of shoots to start away at first, I top the strongest, which makes it send out more. I allow the shoots to grow upwards till about the end of August, when I tie them down to sticks placed round the pot, bending them in the form of an umbrella, which makes them send out young shoots above the shortest circumference of the bend, caused by the partly closing of the sap vessels at that portion, which forces the sap into the buds, at the same time it stops part of the sap from going into the point of the shoots, which makes them flower sooner. In that method of training, they form beautiful plants, with fine spikes of flowers in the months of December, January, and February. They are easily propagated by cutting. I strike them in a pot well drained, and some peat above, and then some silver sand, and place them in a cucumber frame, shading them, and giving them water as they require it.

ALEXANDER SHEARER.

## ON ANNUALS.

BY MR. R. PLANT, OF PADHOLME NURSERY, PETERBOROUGH.

(*Continued from p. 46.*)

TENDER ANNUALS, as a class, are numerically deficient; yet the deficiency of numbers is fully made up by their resplendent beauty, and the great inclination exhibited to throw off varieties, or sport, as it is technically termed. Nowhere is the hand of the experimental and consequently superior cultivator more plainly seen than in the class of plants denominated Annuals. If we examine any of the very old gardening works, the tender annuals will be found to equal in number the half-hardy, or nearly so; but how very different is the case now! By the safe conduct and example of spirited experimentalists, we place in the open air, to attain a robust growth, those plants which, a few years back, were considered difficult to grow, as being too tender to bear a breath of wind; and difficult they certainly were, simply because the treatment applied was not proper. The term *tender* must be strictly confined to those annuals which, on trial, are found to attain their proper growth—that is, the most luxuriant, accompanied with the greatest number of flowers—only by and with the aid of artificial heat under glass. Now, some of these do sometimes find their way into the open air, yet it must be confessed the appearance they make is very near the ridiculous, and ever such a novice in the art would immediately conclude they were not in their proper places. To grow tender annuals the aid of glass is absolutely necessary, together with artificial heat produced by fermenting materials; and these must be exactly of the proper description, or perfection, either in the growth or flowering, will not be attained.

The principal among tender annuals is the Balsam. The first sowing should be made in March, either early or late, as it may be desired to have them bloom; and a second about a month after the first: two sowings are generally sufficient, from the length of time the plants continue in bloom. The seed should be chosen from some that are two or three years old, selecting the largest; sow them *thinly* in some very rich mould, and, as soon as they are from an inch to two inches high, transplant them singly into small pots (60's), using the same kind of rich mould—mould from

an old cucumber-bed is the best. The heat they require when sown, and until the second shifting, is about 65°, giving them as much air as is consistent with the state of the weather : in about ten days they will require a second shifting. A small quantity of well pulverized loam should be added to the compost, and the plants placed near to the glass ; the maximum heat should now be 70°, in order to allow for a greater supply of air in the middle of the day. A little water may be given when necessary, after the second shift ; if water is given when the plants are small, or when air cannot be admitted, it often causes them to rot off, and whenever applied, it should be of the same temperature with the air in which the plants are growing. Between the second and third shifting the plants should have grown six or eight inches in height. At the third time of repotting, they should be placed in pots about nine or ten inches deep, in the bottom of which put a good layer of potsherds, then a layer of broken turf, and next the soil, which should be stronger than the last—about half good sound loam, and the other half well-rotted leaf-mould, or old dung : these should be well mixed, and the plants placed so low in the soil that the first or seed leaves may be not more than two inches above the rim of the pot. The plants are now in their most particular stage of growth ; they should be placed in a large pit, where a good supply of both bottom and surface heat can be commanded, for if any reduction of either takes place, they immediately commence blooming, and consequently cease to grow ; they should be half plunged, and kept about two feet apart, or more if there is room. From these pots they may be removed as soon as the roots reach the bottom, into the blooming pots, which should be as large as convenient to carry ; about 14 inches deep is the size I usually bloom them in ; in these place a good drainage and turf as before—the soil now should be entirely loam ; place the plants as low as possible, without disturbing the roots more than can be avoided, observing to fill all the spaces between the ball and the side of the pot. They should now be returned to the pit till the flowers are most of them expanded ; then remove them to the conservatory or greenhouse. During the time they remain in flower they require a liberal supply of water, and a little liquid manure may be given with advantage about once a week. In growing Balsams, much depends on the choice of seed, as there are some of a very inferior description. Seed should always be saved from the most double varieties, and that which is

from two to five years old will produce more double flowers than plants raised from more recent seed.

Next in importance is the Cockscomb (Celosia cristata.) The treatment of these is essentially different from that suited for Balsams. As in the case of the last mentioned, a very luxuriant growth is chiefly aimed at, while with cockscombs the reverse is the desideratum, the principal object of the florist being to produce the largest flower on the smallest plant possible; hence, it necessarily follows that, with a plant differently constituted and a different object in view, another mode of treatment must be followed. That with which I have been most successful is the following; though, in the first place, it should be remarked, unless seed can be obtained from plants that have produced good flowers last summer, it is almost useless to sow it, as disappointment follows in nine cases out of ten. Having procured good seed, sow it moderately thin, in pans or shallow pots, in some very old leaf-mould, or other light rich earth. The best season for sowing is the middle of March, and one sowing is usually sufficient; when sown they may be placed in the same frame with the young Balsams, or in one at about the same heat (65°); as soon as they are large enough to handle, pot them off, using the same light soil and small pots, one plant in each, and return them to the frame; no water should be given, except what may be necessary to settle the earth when sown and repotted. Keep them in this frame and in the same pots till they show flowers, observing to keep up a good moist heat by the aid of linings to the bed; as soon as they show flowers, repot them immediately into the pots they are intended to bloom in: the soil used at this shift should be just the opposite to that they are growing in—a good yellow turfy loam is the best. By this sudden change the object of large flowers and small plants is gained, as the plants, by being grown in small pots and a light soil, are brought, as it were, prematurely into a flowering state, and consequently dwarf in habit; and the flowers being situate at the extremity of the plant, all the stimuli of the new soil flows at once into them, instead of being spent in the production of stem and leaves, and so forms the fine large head so generally admired. When the plants are placed in the blooming pots, a lively heat must be kept up, together with a moist atmosphere, to prevent the attacks of the red spider, though the extremes of both must be avoided. They do not require much water until the flowers are nearly full

grown, till when, the best way to give it them is to slightly syringe them about every other day. When full grown, they may be removed to the places they are intended to ornament, where they will require a larger quantity of water, and occasionally liquid manure. They continue in perfection, if attended to, a very long time. One thing must be observed; when the plants are young, preserve the bottom foliage by all means, as, if the leaves are rubbed or fall off, they never produce others in the same parts.

The remaining tender annuals usually grown are the Globe Amaranthus (Gomphrena globosa), and the Egg Plant (Solanum ovigerum); there are two varieties of each, the purple and white flowering Amaranthus, and the white and purple fruited Egg Plant; the treatment is the same for the whole of them. They should be sown at the same time and in the same manner with the Balsams; as soon as they have attained one or two inches in height, they should be potted singly in small pots, using the same kind of soil as recommended for Balsams and Cockscombs while small. In these pots they may remain till six or eight inches high; then repot them into the pots in tended to bloom them in; these should be about six inches deep (small 32's); the soil most suited for them now is a mixture of equal parts of turfy loam and leaf-mould; return them to the pit or frame till full grown; they do not require so much room as Balsams, being of dwarfer habit. A good supply of water is essential to their well-being, and the Solanums should not be allowed to retain too many fruit, or they will be of inferior size; this fruit is occasionally used as a culinary delicacy. Little more is necessary beyond the usual attention when in a mature state. These last may be grown by any person in a common garden frame; but Balsams and Cockscombs certainly require a higher degree of cultivation, and structures of a larger and more refined description.

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## ON THE MODERN MODES OF HEATING PLANT HOUSES.

I DO not offer the following remarks, because little has been written on the subject, but simply because I am sure that, out of the numerous modes adopted at the present day, nothing is more difficult than for persons, who have not seen each fairly tried, to make choice of the best.

It is true, that very much has been said on the merits and demerits of each, in the gardening periodicals; but the public have often too much reason to believe that some of the writers are guided by interested motives; others are, on the other hand, very much influenced by prejudice; while those who enjoy the reputation of being capable of deducing an opinion from a knowledge of pneumatics, hydrodynamics, and physiological investigation, are those who have run into the greatest errors: one, by giving an unqualified approval of the working of a new invention, because it has some good parts to recommend it; another, as readily condemning the whole for one defect.

I scarcely need to say, that to provide an artificial climate for plants—the admission of one natural agent (light) being considered—a supply of heat, pure air, and atmospheric moisture is indispensable; and an apparatus possessing the adaptation to supply these, through its medium, with a due regard to economy, durability, and simplicity in its construction, rendering each element subservient to the purpose for which it is required, and placing the whole perfectly under the control of the cultivator, is the great desideratum in all plant houses.

The first introduction of hot-water pipes, though an improvement on the old system of flues, as a means of heating the air in a house, made no provision for supplying that air with vapour, when required, with anything like precision. It is true that any quantity of moisture might be raised in the house, even to saturation, by throwing water on the pipes and the pavement: but, by the former expedient, *steam* is produced, which is found to be prejudicial rather than advantageous to most plants. It also causes a fluctuation of temperature, as a large quantity of heat is absorbed in the formation of it. And to expect a supply of vapour by keeping a cold pavement wet, is not much more reasonable than to regard the glass roof as an evaporating surface, because the *rate* of evaporation is always regulated by the degree of heat in connexion with the water; therefore, it is the stratum of air immediately above the floor which furnishes the heat requisite for the transition from the liquid to the gaseous form. And as this stratum of air is, from physical causes, the coldest in the house, it follows, as a matter of course, that it is not the most favourable to facilitate evaporation. The fact, therefore, must be obvious, that it is utterly impossible to imitate nature in balancing the temperature and moisture of the air by either expedient above

alluded to: and nothing but the erroneous impression, "that there is an affinity between the particles of air and those of water," could have induced the supposition. This, then, is one of the defects incident to all the inventions of art, "that though the radiating surface of the pipes does not imbibe or decompose the atmospheric moisture, it gives to it that buoyancy which causes a large quantity of it to escape through every crevice of the roof, and the remainder to be precipitated upon every object in contact with it, of a lower degree of temperature than itself." And for this loss no compensating medium is provided in the construction of the apparatus. Connected with this negative imperfection is another of almost as much consequence, which in my opinion has not attracted the attention it deserves; namely, no means are provided for counteracting the mischievous effects produced by the admission of cold air when ventilation is employed. There can be no doubt that an undue importance has been, to a great extent, attached to ventilation; and the sickly, etiolated, appearance of stove plants in winter, instead of being attributable to a close atmosphere, might, with much more reason, be ascribed to a higher degree of temperature, and an insufficiency of light. But still, in most houses, ventilation is necessary; and to have the means is requisite in all, if it be only to expel gaseous and vaporous impurities. It is, however, an error to suppose that the air admitted by ventilation, passes through that which is escaping, and so becomes partially heated before it reaches the plants; this cannot be the case; because, while the house is closed, the dilatation of air produced by an elevated temperature is resisted by compression, and its elastic force is increased; so that, when a top light is let down (which is the usual mode of ventilating in cold weather) the whole aperture is filled by the heated air escaping, until its pressure is reduced below that of the external atmosphere, when the latter immediately enters, and by its superior gravity falls to the bottom of the house, rapidly increasing in volume, till the whole of the former is driven off. Thus, in a few minutes, the plants are subjected to a change of often more than twenty degrees of temperature; and the time chosen for this is when the organs of every plant are impelled to activity by the sun's rays. The consequence is, the sap brought to the surface of the leaves for decomposition and elaboration, passes into vapour, and the heat required to dilate it is extracted from the plant. The warmth, too, which enabled the spongioles to perform their

functions, becomes latent in the moisture given off by the pots. And thus the absorbent action of the plant is arrested when the greatest demand is made upon its juices.

Having endeavoured to show the necessity of a well-regulated system of applying artificially the principles essential to vegetation, it will be my object in the next paper to describe the mode by which that end may be attained. WILLIAM SHERWOOD.

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## ON SPRING FLOWERS AND SPRING GARDENS.

NUMEROUS as are our printed works on the different departments of floriculture, there is not one expressly upon Spring flowers; and as for a Spring garden, it is never so much as noticed. This cannot be owing to the subject never having been treated of; for there are various places styled "Spring Gardens," both in the southern division of the country and in the northern; and these places must have originally obtained their names from being principally appropriated to the growth of Spring flowers. But if it once was the practice to cultivate such flowers upon an extensive scale, the practice has now fallen off. Spring flowers are not the leading subjects anywhere: they are generally planted in detached spots, and concealed from the view by plants of more lofty growth.

This is the more to be regretted, as almost all Spring flowers, though small, are pretty; as the Spring is the time when a flower-garden is most wanted; and as, if placed in beds, or large groups of the same species together, they would have a very rich and imposing appearance.

They have other points of interest about them: they are all very hardy, and not injured by those vicissitudes of the Spring weather which are often so injurious to summer flowers, and that in the most early stages of their growth. They also require scarcely any attention; so that the cultivator has nothing to do but to place them in the appropriate situations, and leave them there, and they will not fail to grow vigorously and flower well. In order that they may do both with their full vigour, they are better on the south side of a wall, or in some situation where they are sheltered from the cutting winds of the north and north-east. Garden mould is the best soil for them all, and if it is light and friable so much the better. Such of them as are bulbous, or have

thick and fleshy divided roots, are the better for being ripened, by exposure to the sun and air; but they ought not to be taken up until they are matured and their growth has completely ceased. As they are all hardy, and some of them but little changed by that simple culture which they require, it is not absolutely necessary to take them up and dry them; though even the hardiest of the bulbous ones, even those which grow beneath the snow, and occasionally bloom up through it, are all the better for being dried.

The great charm consists in their being in full bloom when there is scarcely another bloom in the garden, or even in the fields; and considering this, one feels a little astonished that they have not been planted in masses, whereby full effect would be given to their beauty. When once in the ground, almost the only treatment they require is to have the ground beneath them lightly forked and neatly trimmed, and the dead leaves carefully picked off early in the Spring. Generally speaking, their flowering and growth are completely gone before the summer flowers come into action; and thus they make a complete succession. They are exceedingly numerous; so that the following List, which is rather a copious one, contains merely a selection.

## LIST OF HARDY SPRING FLOWERS.

Those marked *b* have bulbous roots, the others not. The colour of the flower and average time of blooming are given at the end of each line.

Pulsatilla vernalis, purple; April
cernus, blue; April
Halleri, blue; April
Anemone pavonia, red; April, May
varieties, variegated; ditto
Canonata, blue; April
Uralensis, ditto
Cærulea, ditto
trifolia, white; ditto
Richardsonii, yellow; April
Hepatica triloba, variegated; March, April
Adonis vernalis, yellow; March, April
Siberia ditto
Evanthi hyematis, yellow; Jan. to April
Helleborus niger, white; Jan. to March
purpurea, purple; March, April
atrorubris, dark red; Jan. to April
Epimedium Macranthum, white; Mar. Apr.
biolaceum, violet; March, April
Musschianum, white; ditto
Sanguinaria Canadensis, white; Mar. Apr.
Aubrietia deltoidea, purple; ditto
purpurea, purple; ditto
Persicaria reticulata, yellow; ditto
Draba brachystemon, yellow; Feb. March
aizoides, yellow; ditto
Orobus vernus, purple; March to April
Gentiana verna, blue; March to May
Polemonium Mexicanum, blue; Mar. April
reptans, blue; April to May
Omphalodes verna, blue; March to May
Chertensia pulmonæoides, blue; ditto
Cyclamen corn flower, red; Jan. to May
vernum, red; Feb. to May
sepaudum, red; March to April
Dodecatheon Sheadia, lilac; April to July
integrifolium, violet ditto
Primula marginata, rose; March to April
longifolia, lilac; April
Attaica, lilac; March to May
longiflora, lilac; April to May
longiscapa, lilac; March to April
nivalis, purple; April to May
carmatica, violet; ditto
glutinosa, violet; March to May
nivea, white; March to April
acaulis, striped; ditto
Soldanella montana, blue; April
clusia, blue; March to April
Alpina, do.; April.
Cortusa Matthioli, lilac; April to May
Iris susiana, brown and black; Mar. to Apr.
livida, purple and blue; ditto
subbiflora, blue; April to May
lurida, dark purple; ditto
biflora, purple, violet; ditto
furcata, blue; March to May
lutescens, yellow; April to May
verna, blue; ditto
hœmatophylla, blue; ditto
lærigata, ditto ditto
Nertchinskia, ditto ditto
Nerthenica, ditto ditto
tenax, purple, ditto ditto

Iris longifolia, purple and green, Apr. May
tuberosa, *b.* violet, March to April
reticulata, *b.* blue; April to May
Xiphium, *b.* variegated; April to June
Lusitanica, *b.* yellow; April, May
Caucasica, striped; Feb. to April
Persica, blue and yellow; March. April
Trichonema bulbocodium, *b.* purple; March April
purpurascens, *b.* purple; March, April
columnæ, *b.* striped lilac; ditto
ramiflorum, *b.* purple; ditto
cœlestinum, *b.* blue; ditto
speciosum, *b.* rose; ditto
Crocus vernus, *b.* variegated; Feb. April
striatus, *b.* white, violet; ditto
versicolor, *b.* white, blue; ditto
odorus, *b.* blue; ditto
suaveolens, *b.* blue, yellow; ditto
biflorus, *b.* white, purple; ditto
pusillus, *b.* white, purple; ditto
præcox, *b.* purple, white; ditto
albiflora, *b.* white; ditto
variegata, *b.* yellow, purple; ditto
argenteus, *b.* white, purple; ditto
Lusianus, *b.* yellow, purple; ditto
reticulata, *b.* yellow, violet; ditto
sulphureus, *b.* straw, yellow; ditto
stellaris, *b.* yellow, purple; ditto
lœvenaflorus, *b.* straw, yellow; do.
lacteus, *b.* straw, violet; ditto
aureus, *b.* yellow; ditto
luteus, *b.* yellow; ditto
mœsiacus, yellow; ditto
Trillium sessile, dark purple; April
petiolatum, ditto ditto
cernum, white; ditto
erectum, dark purple; ditto
pendulum, white; ditto
obovatum, ditto ditto
grandiflora, ditto ditto
Catesbæi, red; ditto
stylosum, rose; ditto
Ornithogalum umbellatum, *b.* white; April
refractum, *b.* white, green; ditto
exscapum, *b.* ditto ditto
fimbriata, *b.* ditto: Feb. to April
Gagea fascicularis, *b.* yellow; March. April
bracteolaris, *b.* ditto ditto
glauca, *b.* ditto ditto
Scilla cernua, *b.* rose; ditto
amœnula, *b.* blue ditto
amœna, *b.* ditto ditto
Siberica, *b.* ditto ditto
patula, *b.* ditto; April
bifolia, *b.* variegated; Feb. April
carnea, *b.* flesh-coloured; ditto
præcox, *b.* blue; ditto
verna, *b.* ditto; March, April
umbellata. *b.* blue; ditto
italica, *b.* blue; ditto
Hyacinthus orientalis, *b.* blue; Mar. April
spicatus, *b.* blue; ditto
amæthystinus, *b.* blue; April
Muscari moschatum, *b.* brown; April
macrocarpum, *b.* yellow; ditto
comosum, *b.* purple; ditto
monstrosum, *b.* purple; ditto
celestum, *b.* white, purple; ditto
racemosum, *b.* blue; ditto
commutatum, *b.* dark blue; ditto
pedunculare, *b.* blue; March, April
botryoides, *b.* variegated; ditto
azureum, *b.* bright blue; ditto
album, *b.* white; ditto
carneum, *b.* blush; ditto
Tulipa stellata, *b.* blush, white; ditto
Tulipa montana, *b.* crimson; March, April
patens, *b.* white, green, yel.; ditto
biflora, *b.* white, violet, yel.; April
præcox, *b.* scarlet, green; Mar. April
Persica, *b.* scarlet velvet; ditto
suaveolens, *b.* scarlet, yellow; ditto
scabriscapa, *b.* variegated; April
pubescens, *b.* variegated; Mar. April
Fritillaria præcox, *b.* white; ditto
cheleagris, *b.* purple, white; ditto
minor, *b.* dark violet; ditto
tenella, *b.* brown, purple; ditto
nervosa, *b.* dark purple; ditto
imperialis, *b.* yellow, red; ditto
Amblirion album, *b.* white; April
Erythronium dens-canis, *b.* purp.; Mar. Apr.
Americanum, *b.* yellow; April
longifolium, *b.* rose; March, April
albidum, *b.* white; April
grandiflorum, *b.* yellow; April
Bulbocodium vernum, *b.* lilac; Feb. to Mar.
Helonias bullata, *b.* purple; April
Galanthus nivalis, *b.* white; Jan. to March
plicatus, *b.* white; Feb. to April
Leucojum vernum, *b.* white; Feb. to April
carpathica, *b.* white; ditto
æstivum, *b.* white; April, May
pulchellum, *b.* white; ditto
trichophyllum, *b.* white; Jan. to Mar.
Narcissus obvallaris, yellow; March, April
lorifolius, *b.* white, yellow; April
bicolor, *b.* white, yellow; Mar. to May
tortuosus, *b.* white, straw; April
moschatus, *b.* white; March, April
cernuus, *b.* white; ditto
*β* plenus, *b.* white, double; ditto
major, *b.* yellow; ditto
maximus, *b.* yellow, green; ditto
propinquus, *b.* yellow; ditto
serratus, *b.* straw, yellow; ditto
pseudo-narcissus, *b.* yell.; ditto
lobularis, *b.* yellow; ditto
minimus, *b.* yellow; ditto
Maclegii, *b.* straw, yellow; April, May
Sabini, *b.* straw, yellow; ditto
tenuifolius, *b.* yellow; ditto
conspicuus, *b.* yellow; March, April
serotinus, *b.* yellow; ditto
bulbocodium, *b.* yellow; ditto
incomparabilis, b. straw, yell.; ditto
montanus, *b.* white; April
triandrus, *b.* straw; ditto
Jonquilla, *b.* yellow; April, May
medius, *b.* yellow; ditto
simillis, *b.* yellow; ditto
gracilis, *b.* yellow; ditto
tenuion, *b.* yellow; ditto
orientalis, *b.* straw, yell.; ditto
nutans, *b.* yellow; March to May
concolor, *b.* straw; April
pulchellus, *b.* white, yellow; April
odorus, *b.* yellow; March
Curtisii, *b.* yellow; ditto
bifrons, *b.* yellow; April
Cypri, *b.* white, yellow; March, April
lacticolor, *b.* milk; ditto
primulinus, *b.* yellow; ditto
teniticaulis, *b.* yellow; April
cupularis, *b.* yellow; ditto
Trewianus, *b.* white, yellow; April
citrinus, *b.* white, yellow; ditto
papyratus, *b.* white; Feb. to April
italicus, *b.* straw, yellow; ditto
multiflorus, *b.* yellow; April, May
angustifolius, *b.* white; April
patellaris, *b.* white, copper; April
stellaris, *b.* white, crimson; ditto

## CALENDAR FOR MARCH.

STOVE.—The seasonal growth of plants is now commencing; the cultivator must now be ever on the alert, not only to supply the wants, but rather anticipate them, of his numerous charge. Climbers require constant attention; those plants intended for large specimens should be frequently shifted, allowing them a richer soil than common. Repot any plants that may require it, always observing to give a good drainage; repot and start for flowering all Cacti requiring it. Free-growing soft-wooded plants will frequently require their leading or terminal shoots stopped. Air may be admitted whenever the thermometer rises to 70° of sun heat, when it may be safely allowed to range as high as 80°, if proper attention is given to that most essential point of spring culture, a moist atmosphere, to preserve which the paths of the house should be frequently saturated with water,—as often as two or three times a day is necessary, whenever the sun has much power; the plants also should be syringed over head two or three times a week, and more water may be given to the plants individually as the season advances.

GREENHOUSE.—Here, too, the increase of genial warmth out of doors should be met with increased stimuli within. Finish repotting Fuchsias, Geraniums, and other soft-wooded plants, as soon as possible. Place sticks to all fast-growing plants, but do not crowd the shoots. Climbers and creepers must be frequently tied or nailed, but not too thickly; repot specimen plants; and top dress those which do not require repotting. An increased supply of water may be given to Geraniums and soft-wooded plants, but sparingly to New Holland and other hard-wooded plants. Hyacinths and other bulbs may be brought into flower; a plentiful supply of air is necessary on every suitable occasion. Fumigate on the first appearance of green fly, and repeat it the next day, as some of them may escape the first, but few the second application. Continue to propagate plants for the flower borders.

FLOWER GARDEN.—Sow a succession of hardy and half-hardy annuals; this is the best time to sow tender annuals also. Dahlia, Auricula, Pansy, and other perennial seeds may also be sown. Continue the propagation of Dahlias. Prune and tie creepers and climbers; prune Autumnal Roses. Plant out Pansies, and propagate them for an autumnal bloom. Attend to Auriculas. Picottees and Carnations may now be placed in the flowering pots. Plant out hardy herbaceous plants. Repot those annuals sown in pots last month. Finish planting deciduous trees and shrubs as early as possible. By the end of the month the removal and planting of evergreens may be commenced. Lay turf, and gravel. Finish digging the flower beds, but do not rake them yet.

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If "R. W. C." will favour us with his address, we will answer all his questions fully.





WINTERTON RIVAL. (NELSON'S)

London How & Parsons. April 1.1842.

THE

# FLORIST'S JOURNAL.

APRIL 1, 1842.

## THE DAHLIAS.

WITH A PORTRAIT OF THE WINTERTON RIVAL—(NELSON.)

BUT very few of our floral favorites have ever arrived at the eminence attained by the Dahlia; indeed, so very general and strong has the admiration of it become, that it is now quite a necessary adjunct of the flower garden. To say anything on the cultivation of it would be a work of supererogation—as the common routine of culture is so generally understood, and having also, in the last November number of the "Florist's Journal," mentioned its leading physiological characters, we therefore content ourselves with introducing our present illustration to the notice of our readers. The Winterton Rival was raised by the Rev. John Nelson, Rector of Winterton, Norfolk, and bloomed in the summer of 1840; it possesses great depth of petal, is of a delicate and much required colour, and altogether appears a very promising flower. Messrs. Low and Co., of Clapton, who are in possession of the stock, describe it of excellent habit, and very true to its character. We believe they intend sending it out the present season; and from their known respectability we do not doubt that it will give very general satisfaction.

## ON THE CULTIVATION OF THE GENUS MAXILLARIA.

This genus belongs to the third tribe, Vandeæ, of the natural order, orchideæ, and it is a genus which is very variable, and contains a great number of species, and many of them are very beautiful and well worth cultivating; wherever there is a stove this genus has in part been divided into several genera, but if those genera can, with any propriety, be divided from maxillaria, I can see no reason why they should not divide the whole of the genus maxillaria, and arrange them according to their external habit, which, in my opinion, would be more comprehensive than separating them by some slight difference obscured in the minute parts of the flowers, which none can know of but those who have the use of a powerful microscope. Not anything can be more beautiful than a description of the minute parts of flowers, as seen under a powerful microscope; and especially that of orchideæ, in which the parts of fructification are not so distinct as in other tribes of plants, although they are equally as perfect. All the minute parts of flowers should be given in a general description, both of the genera and species, but not with any view of making a separation by those minute parts, at least a separation as genera, but would be beautiful as a sectional deviation. By this mode of dividing plants into genera, by the minute parts of flowers, they have rendered botany a perfect Babel instead of a science perfect and beautiful; and the longer they continue, they seem to make confusion doubly confused. Before we can expect ever to see botany perfect, we must wait for another Linnæus, which I fear will be a long time. Our present race of botanists does not appear to have the good of the science at heart, but merely a wish to make themselves appear great and to confuse one another.

The plan which I should recommend for the successful cultivation of this tribe of plants is, that they should be grown in pots or on pieces of hard wood; but for the large growing species pots are best suited, for then when grown in pots turfy-peat and sphagnum, cut small, is the best for them. When this is used, it unites into a fine porous mass, which never

becomes sodden with wet, as moss will do when put into the pots in a whole state, and peat the same when it becomes exhausted. But when peat and moss cut into a small state are united together, they hold together in one mass, which never becomes sodden, but on the contrary very porous, and in time will become perfectly firm, when the roots will grow with great freedom, and water in the growing season can be given without fear. For the strong growing species I should recommend pretty large pots, as they will grow much freer and flower finer than in small pots; while, for the smaller growing species, small pots or logs will be the best, when potting, which should be done in the growing season; the pots should be filled up with large potsherds one half, and over that should be laid some sphagnum or common bog moss, uncut, to prevent the other portion of the soil from getting through among the potsherds, and when it is filled up to within two inches of the top of the pot, the plant should be placed in the centre, and then the soil should be placed all round and pressed rather tightly down, and they should be made fast by being tied to some small stakes till such times as the plants have got hold, which they will soon do, as soon as they begin to root. In the growing season the heat should range from 55° to 100°, but in the resting season the heat should range from 50° to 70°, but should not go higher, nor much lower. When the plants have finished their growth, they should be removed out of the growing-house into the resting-house, and there to remain till they show signs of growing, for they will flower very well in the resting-house, much better than in the growing-house, and last longer; and those species which smell, the smell will be more agreeable and more powerful than it would be in the growing-house. When the plants show signs of growth they should be removed out of the resting-house, and put into the growing-house, but should not have any water for three weeks or a month, as the moisture in the house will be quite sufficient for them; they should be gently syringed after the first week, but no water should be given at their roots for a month after being taken to the growing-house.

Many persons condemn the system of resting; but as far as I have seen I cannot agree with those persons, although many species will do very well without resting; but still they do equally well, with less trouble, and less fear of losing the

species, by resting them. But when plants of this description are forced to grow in the winter, I have always seen the plants grow very weak in the summer, or not grow at all, and very often the pseudo-bulb which they made in the winter was very weak, and seldom or ever flowered. Therefore, all those persons who wish to have their plants looking healthy in the summer, will do well not to attempt to grow their plants in the winter, for, in my opinion, we ought to follow nature as near as possible; in all respects in nature the plants have a rest at certain seasons of the year, although we cannot get them to rest at the same period as they do in their native country; we must watch them, and when they show a disposition to rest we must give it them; they will not all rest at the same time, nor grow, nor flower; but in the winter season the growing-house should not be kept so high as in the summer, a temperature of 60° of artificial heat is equal to a temperature of 80° or 90° of natural or sun heat; therefore, a high artificial temperature in the winter, even in the growing-house, must be very destructive to vegetation. With respect to the species grown on logs, the logs should be in proportion to the size the plants grow to. The moss used for logs for this tribe of plants should be small, neat, green tufts of moss, and not put on too thick, as the roots of all the smaller species of maxillaria are all very small and wiry; therefore the nearer they are to the wood the better in the growing season. The plants on logs will require to be syringed every morning and evening, and even in the middle of the day, to get them to grow firm, as many of the smaller species are very beautiful, even as fine as many of the larger species, although their flowers are not quite so large. All this genus is to be found inhabiting trees and rocks in Brazil, Jamaica, and other parts of South America, in Mexico and Guatimala. I shall now enumerate some of the principal species belonging to this curious genus.

*Maxillaria stapeliflora*, stapelia-flowered. This is a neat little species; the flowers are large for the size of the plant; the pseudo-bulb is small, of a light green, with two leaves at the apex of the bulb, and two smaller leaves at the base; the flower-stem comes out from between the bulb and the sheathing leaf, and is pendant, with from three to ten flowers on each spike; the sepals are green, spotted with very dark brown;

the petals are thin, and of a greenish yellow spotted with brown; the lip is round and pointed in form like stapelia; flowers of a dark brown. Native of Brazil, introduced in 1825.

*Maxillaria Rollissonii*, a very beautiful species nearly related to stapeliflora, but differing much in the form of flowers, and also in the form of the pseudo-bulb and leaves. This plant is altogether larger than stapeliflora; the bulbs are somewhat four-angled, and of a pale green; the leaves are lance-shaped and pointed, of a very pale green, just as if they were mixed with white; the flowers are large, on pendant spikes, they bear about four to eight flowers on each spike; the sepals are of a greenish yellow; the petals are greenish white, dotted all over with beautiful brownish purple spots; the lip is large and round, nearly covered over with brownish purple, which gives to the plant a pretty effect. A native of Brazil, introduced in 1838.

*Maxillaria Tyrianthena.* This is a splendid species; the sepals are green and rare; the petals are of a light purple white; the lip is a sort of crimson; the pseudo-bulbs are four-angled, of a reddish brown, thick at the base, and taper towards the top; the leaves are on rather long footstalks; leaf ovate and pointed, of a brownish green; in habit very like Harrisoniæ. A native of Brazil, introduced in 1836.

*Maxillaria rufescens.* The pseudo-bulbs compressed on both sides; the leaves lance-shaped and pointed, one leaf to each pseudo-bulb; the flowers come from the base of the bulb, on rather short peduncles; the sepals are brown, the petals pale yellow, the lip yellow, with brown and orange spots. This is a very pretty species, and a free flowering. A native of Trinidad, introduced in 1837.

*Maxillaria punctata.* This species is nearly related to picta, but the flowers are not quite so large, and instead of being blotched they are spotted; the leaves and pseudo-bulbs are nearly the same as in picta. A native of Brazil, introduced in 1830.

*Maxillaria parvula.* This species is very near Harrisoniæ, but much smaller in all its parts, but very near it in colour: it is a very pretty plant, and well worth cultivating, although it be only a variety of Harrisoniæ. A native of Brazil, introduced in 1835.

*Maxillaria graminea*, grass-leaved. This species has small ovate pseudo-bulbs and very small leaves, which are very linear; the bulbs and leaves are of a dark green; the flower comes out from the sheathing at the base of the pseudo-bulbs; the flowers are not very large, but they are very beautiful; the sepals and petals are yellow, with a few purple spots; the lip is nearly all purple; the flowers are on very short peduncles, rising very little above the sheathing. A native of Demerara, introduced in 1835.

*Maxillaria citrina*, a rather pretty species; the flower is citron-coloured. This species is rather scarce; was introduced in 1839. A native of Brazil.

*Maxillaria Parkeri.* The pseudo-bulbs are somewhat compressed on both sides; the leaves are long, lance-shaped, one to each bulb, of a glossy green, and pointed, without any footstalk; the flower is of a pale yellow, on single footstalks. A very free-flowering plant, and very handsome. A native of Demerara, introduced in 1835.

*Maxillaria clonantha.* This species is very like Parkeri in habit, but the pseudo-bulbs are more round and much smaller, and also the leaves; the bulb is of a dull green, and the leaves of a glossy green; the flowers are very numerous, of a pale greenish colour, which are very pretty. A native of Brazil, introduced in 1835.

*Maxillaria ochnoleuca.* This is a large-growing species; the pseudo-bulbs are compressed, ovate, furrowed, of a brownish green; the leaves are long, lance-shaped, and pointed, smooth, of a dull green. This species flowers at the beginning of the growing season; the flowers come out from the base of the pseudo-bulbs; they are numerous with single footstalks; the flowers are not large, of a pale yellow; the sepals and petals are small, linear, pointed; the lip is shorter than the sepals and petals. Native of Brazil, introduced 1836.

*Maxillaria viridis.* This is a beautiful species, and also very rare. The leaves are ovate, lance-shaped, and pointed, of a pale green colour; the pseudo-bulbs are of pale green, transparent and beautifully veined; the flowers are on pendant spikes; the sepals are green, the petals are of a pale green colour; the lip is white, with little purple spots. Native of Rio Janeiro, introduced in 1834.

*Maxillaria imbricata.* The flowers of this species are white, the pseudo-bulbs are ovate; long rhizomas, which are very much imbricated, out of which come the flowers, which are rather numerous, and somewhat pretty; the leaves are linear, lance-shaped and pointed, of a rich green. A native of Jamaica, introduced in 1830.

*Maxillaria Harrisoniæ.* This is a very fine species; the leaves are large, of a dark green, strongly veined, ovate pointed: the pseudo-bulb is triangle, broad at the base and tapering towards the top; the bulb is of a brownish green; the pseudo-bulb is united by a short rhizoma; the flower stem proceeds out from the base of the pseudo-bulb, and bears from two to three large whitish-coloured flowers; the sepals are greenish-white, and petals white; the lip is large and covered with reddish-brown hairs on the inside, which gives the flowers a fine appearance. This is a native of Brazil, introduced in 1820. Flowers from April to June.

*Maxillaria Aromatica.* A beautiful species; the leaves are ovate-pointed, very strong veined, of a thin texture; the pseudo-bulb has two leaves, which proceed from the apex of the bulb; with two leaves from the base, or, what may be called, sheathing leaves. This species flowers at the beginning of the growing season, throwing up a great many flowers at one time of a beautiful lemon colour, and having a strong smell of cinnamon; the flower stem only bears one flower, but they are so many that the whole plant is covered with one sheet of yellow, which has a most splendid appearance. This species, before it flowers, loses all its leaves, and then the flowers are seen to great advantage. This species does best in a pot. A native of Brazil, introduced in 1825.

*Maxillaria Deppei.* Another handsome species; the leaves are ovate-pointed, of a very rich green, strongly veined, and waved at the edges; the pseudo-bulb is ovate, of a dark green, having two leaves at the apex of the pseudo-bulb, with two sheathing leaves at the base. This species is much in habit like aromatica, from which it is not easily distinguished when it loses its leaves, but by a more dark-green pseudo-bulb, and two strong spines at the apex of the pseudo-bulb. This species also flowers at the beginning of the growing season. The flowers are thrown up in great numbers the same as in aromatica, but the flowers are of a different colour; the sepals are green, spotted

with brown; the petals are white, spotted with brown; the lip is white and yellow and orange; the flower-stem leaves at its apex only one flower, which is very large. This species always loses its leaves before it flowers. This is also a free flowing plant—really, a lovely object when it flowers firm. This requires a good rest, as most of the species does. A native of Mexico, introduced in 1828.

*Maxillaria Steelia.* This is a most singular species and very beautiful. This species has no pseudo-bulbs, but only rhizomas, with long round leaves resembling whipcord, which is of a dark-green colour. The flowers come out from the base of the rhizoma two or three together, which are very large, of a pale yellow, beautifully spotted with brownish purple. This is really a lovely plant; the flower stems are very short; the flowers are almost sitting close to the roots. The whole plant looks like a bundle of whipcord more than anything else that I can compare it to. This species is a native of Demerara, introduced in 1834. This does best on a log of wood with very little moss: requires plenty of heat and moisture.

*Maxillaria Macrophylla.* Large leaved. This is a very fine species with large whitish flowers, which are really beautiful; the sepals are of a greenish white, while the petals are white with purple stripes; the lip is beautifully spotted, the leaves are large, ovate-pointed, and strongly veined, of a dark green colour, and somewhat round at the edges; the pseudo-bulbs are very large, somewhat ovate, tapering towards the apex; the flower stem comes from the base of the pseudo-bulb. This also flowers at the beginning of the growing season. The flowers are very numerous. This is a native of Mexico, introduced in 1837.

*Maxillaria Warreana.* This is a noble species. The spikes of flowers are large and handsome, bearing a number of flowers on each spike; the sepals are of a greenish straw colour, the petals are white, the lip is of a brownish purple, the flowers are large and round, the leaves are broadly ovate-pointed, of a light green colour, the leaves stand on long footstalks; the pseudo-bulb is long, ovate, narrowed very much towards the apex, of a dark-green. This species comes very near the genus Peresteria, both in the form of the flower and the habit of the plant. This is a native of Brazil, introduced in 1833.

(TO BE CONTINUED.)

## AUTUMNAL ROSES.

In our September number, we made some general remarks on this lovely and admired genus of flowers, and gave a very brief explanation of one of the families of autumnal roses, or those which bloom late in the season. Autumnal roses is not exactly the proper name for them, as many of them flower as early as June, or even earlier; but they have, at least when properly managed, two growths in the year, and flower at each; and with skilful management, which consists chiefly in thinning out a considerable number of the summer buds, the commencement of the last flowering season may be made to coincide with the close of the first, and thus they may be kept constantly in flower from the earliest blossom, to the setting in of the cold weather. This makes them very valuable from the length of time that we can enjoy their colours and their fragrance, the former of which is often brilliant and the latter is great. We are originally indebted for them to the French cultivators, whose climate not being so variable as ours during the flowering season, is more adapted for the growth of roses. The French cultivators have also paid earlier and greater attention to the improvement of roses than those of Britain, and though we now have many eminent rose growers, in different parts of the country, who not only cultivate the earlier varieties with much success, but attain fine new ones by cross impregnation, the finer roses do not bear seed so well with us as they do in France; and therefore we still import very considerable quantities.

The cause of the inferior seeding of British roses appears to be the greater humidity of the climate, and consequently of the soil and the greater quantity of rain during the time that they are flowering. It is a truth which should be constantly borne in mind by every florist, whatever flowering plants he may cultivate, that humidity, especially when in excess, is the grand stimulus to the increase of the individual plant, and probably also to the extension of the petals, which may be one reason why flowers which are single in their natural state, become double

when they are cultivated. Rich soil contributes also to the producing of the same effect, because it retains and applies to the roots of the plants more humidity than they have in their natural soil, excepting such as grow in marshy grounds, or are absolutely aquatic; and any one may observe that marshy grounds are not nearly so flowery as those which are more dry. The grand natural stimulus to flowering, and especially to the fertilizing of flowers appears on the other hand to be the influence of the sun as direct and full as the habit of the plant will bear. Supposing the sky to be as cloudless over the humid surface as over the dry one. It is always colder over the former, and a portion of the solar influence is consumed in the production of this cold. The immediate cause of the cold is evaporation; and though the vapour may not be discernible by us, it diminishes the sun's effect in more ways than one. In the first place, the vapour breaks and disperses the rays of the sun, and renders their passage more difficult; and in the second place, the vapour, or rather the moisture, when passing into vapour, actually consumes a portion of the sun's influence—for it is that influence which produces and sustains moisture in a state of vapour; and this diminution of effect is always greater, in proportion as the sunbeams are warmer. This, by the way, is the reason why water, even warm water, is injurious to many plants when they are very hot, and more injurious to the flowers than to any other parts of them; but the watering of flowers is a very nice study and operation, and will require to be treated of in a separate article.

Roses, especially cultivated roses, and more so still, if they are natives of climates more warm and dry than our own, require very skilful watering. We never find our native roses in boggy grounds, though some of them grow in shaded situations, and this as a general principle should guide us in the treatment of roses. Our common dog-rose, though it always grows naturally in rich soils, and can hardly be cultivated artificially, is never met with in boggy or marshy places. It is of great use to study the character of the dog-rose, because it is by far the best stem upon which to bud the finer roses. If in a proper soil, it is easily stimulated and grows most vigorously; and in consequence it renders more energy to the tender roses which are budded upon it than any other standard whatsoever. But still, in the using of it, attention should be paid to the situation and quality of the soil; be-

cause if the situation is much exposed and the soil very poor, the dog-rose is very stinted, and soon ceases to grow. Thus roses upon dog-rose standards are, in such situations and soils, very expensive to keep up, and they never make a good appearance or have fine flowers. The soil may be improved artificially and brought to any degree of richness that may be required; but nothing except shelter will improve the situation. The best of all shelters are belts or clumps of timber, and even these grow slow in such situations, and if composed of shrubs and broad-leafed trees they should be defended against the winds, by larches or some others whose natural habits are in exposed situations, and which therefore can better endure the blasts. If it is wished to cultivate, and have in the greatest perfection that the situation will admit, some of the finer autumnal roses—indeed many of them—it is necessary to attend to this property of the dog-rose: for roses from dry climates, where the soil is apt to be exhausted by heat, thrive best in the situations where the dog-rose thrives most. Most of them are more showy when budded on the dog-rose than when on their natural stems, but if soil rich enough for the dog-rose cannot be found, they should be grown upon their own stem only. It must be borne in mind that in roses—and indeed, in all plants which root in the ground, the adaptation of the soil must be to the root or stem—to the dog-rose of course, in the case of roses budded upon it, and not to the roses so budded. By properly attending to those circumstances, roses may be grown to great perfection, in a great variety of situations, indeed, almost anywhere, unless the winter's frost is sufficient to kill them, and they are not protected from it. As the standard of a budded rose is part of the woody portion of the compound solvent, and not of the flowering portion, a dog-rose standard imparts some degree of its own vigour to the wood of what is budded upon it, without in the least altering the character of the flowers. But we must now say something of the distinctions of those leading groups of autumnal roses which are known by different names.

In doing this, however, we must bear in mind that of all groups of plants those of roses are the most indefinite. They hybridize more easily by art than almost any other plants, and many of them hybridize naturally. Indeed, in them, and in all plants, if there were no natural hybrids, art would have no beginning,

and therefore, though the operation were performed, it would be effectless. This is obvious; for if one flower were hybridized artificially by the pollen of a plant exactly similar no change of character could result from the operation. In the case of naturally-grown plants, where there has been no hybridization, this is strictly and absolutely true; but plants which have been altered by hybridization are always apt to breed back to the variety which has naturally the greatest vigour, and whose characters predominate in the hybrid. Any one can verify the truth of this by actual observation; and this is one of the causes of the great varieties which we find among a group of roses, all of which have in one part of their parentage descended from a single plant, the name of which is applied generally to the group. If the hybridizing plant is less energetic than this one originating plant, its characters predominate in the hybrids, and they are considered here varieties of it; but if the hybridizer is more energetic, they approach its character more nearly in proportion to its greater energy; and where this is the case, they are regarded as varieties of it. Between the original parent plants there may thus be a considerable number of varieties; and at some point of the series, varieties will be found in which the characters of the two originals are so blended together that both of them are lost and the plants are considered as new ones. This is remarkably the case in the natural "sporting of varieties," as it is called; and when the resulting plant is what may be called a perfect hybrid, it is generally, if not always, more true to its character than if one of the original characters were predominant. These principles ought to be well known and understood by all cultivators who hybridize plants, and especially among autumnal roses, where names are given to groups, the characters of which gradually melt into each other, without any definite line of distinction, like the colours in the rainbow. The following are, in addition to the perpetual roses, noticed in our last, the leading groups of autumnal ones.

1. *Bourbon Roses.* The parent plant from which this splendid group originated, appears, as mentioned in our last, to have been a natural hybrid between two varieties growing in the Isle of Bourbon, but what these varieties were is not known. It was found by M. Perichon, a proprietor in that island, among a parcel of seedlings which had grown up in his rose edges, and being

different from all the others, he planted it in his garden. When M. Breon became curator of the botanical gardens in Bourbon he cultivated this one with assiduity, obtained many plants, named it after the island, and in 1822 sent plants and seeds of it to France, where it became a favorite; has been extensively cultivated, and many hybrids obtained from it, some of them resembling the original and some not. The true Bourbons have the leaves serrated, the flowers very handsome, but varying much in their colours, and also in their habit, some of them being dwarf roses, others medium sized, and others again of vigour and growth, and well adapted for pillar roses. Generally speaking, their colours are intense, and some of them almost pure scarlet, but a few of them are blush coloured. The greater part of them answer well for a bed, and their growth, and the sizes and colours of the flowers, make it not difficult, with a proper knowledge of them and a skilful selection, to make up a handsome and varied bed of Bourbon roses alone. Most of them have the flowers double, some drooping and some standing erect. Of the hybrids there are some which are too vigorous in growth for a bed, but they answer remarkably well as pillar roses. One of the most striking of these is Gloire de Rosamiene, which is of luxuriant growth, large leaves, and semi-double flowers of very rich colour. On a pillar it may be grown to the height of fifteen feet; and, as it is in flower from June to October, it forms a most delightful ornament. Many others answer for the same purpose, but the one now named is among the most splendid. The hybrids from the Bourbon roots are however so numerous, and new ones are so frequently obtained, that it is impossible to give any description of them.

2. *China Roses.* These are also called Indian roses; and indeed it is not easy to say in what part of eastern Asia the cultivated roses of these countries originated; we can only say from what country they were first introduced into western Europe. There are two sections of these which are properly called China roses, and supposed to have been introduced into this country in the latter part of the eighteenth century. These varieties are the common China rose, and the crimson, or new-flowering ones.

Both sections are apt to sport so much when raised from seed, and that without any artificial or indeed, it should seem, any

natural crossing, that some of the seedlings appear to be intermediate between the two, and therefore, here is reason to believe that they are original varieties of one and the same. The sported varieties are not distinguishable by colour; for though pale colour is more frequent in the common China roses, and crimson in the new-flowering, yet the common has every shade from white to crimson, and the new flowering from crimson to white. Many of the varieties have colours out of this species, such as blueish lilac, nearly scarlet, blackish crimson, and a variety of other shades. There are great differences among the varieties of these China roses, in the habit as well as in the flowering; and thus they are suited for different purposes. The common China roses are decidedly best for training on walls and trellises, as they are of free and vigorous growth, and remarkably healthy. They are so easily cultivated that many of the humblest cottages in the country are adorned with them, and they cannot be too generally employed for this purpose, as they flower from June to November. The new flowers, when true to that character, are not so robust in habit or so vigorous in growth, and therefore they suit better for the front edges of beds; and as there are many shades of colour with the same feeble habit, considerable variety may be obtained even in a single row by a judicious mixture of these.

China roses are very easily cultivated, and, with few exceptions, they bear the cold of our severest winters: this might be expected of them as natives of China; for though in the northern and mountainous parts of that extensive country the summer is warmer than with us, yet the winter is colder. Any situation, from the cottage rose to the ornamental standard, will suit the common China rose; but the stems in which they are budded should not be more than two or three feet in height. Those standards form fine heads, but as the growth is so vigorous they require an annual trimming. This must not be given them in the autumn or winter, but towards the end of March. They grow so freely that the shoots have to be thinned out, and those which are left cut down to half their length. When this is done they flower vigorously, beginning in June and ending in November. As the flowers fade they should be picked off, as that improves the future flowering, and they do not propel seeds in ordinary situations, or by common treatment. The season of flowering

may also be prolonged by throwing out the flower buds in August, which may be accounted the middle of the flowering season; and if the flowering is then diminished the plant will continue longer and also come earlier into flower. The habit of the new-flowering variety does not make it answer so well as a standard rose; for, though it will flower for some years, if budded on the dog-rose, yet it grows tenderly and irregularly, and never forms a handsome head. Its proper situation, as we have said, is, as a bed-rose, of comparatively humble growth, and there it answers very well. China roses also suit well in pots, and as, like most of the genus, they love a rich soil, manuring with manure water or with moist manure spread on the top of the pots very greatly improves them. The pots also should be large and by this treatment stout stemmed standards may be obtained in flower for great part of the year.

If seed is desired, it cannot be obtained without attention is paid to situation. This must be in a dry and warm soil, with plants trained against a wall facing the south; and if the wall contains flues for heated air, it is all the better. This being rather a troublesome operation, and the plants being so easily multiplied by cuttings, seed is seldom sought for in this country, the more so as the humidity of even the warm season is against their being perfected. More attention is paid to it in France because the climate is more suitable, and the French florists pay more attention to the culture of roses than we do. Even they, however, have not paid to the seeding of China roses so much attention as the subject deserves. In a green-house well raised, seed is produced better perhaps than even on the south side of a flued wall; and as the plants, though common, are ornamental, the finer sorts should be treated in this way, and if they are mixed, the probability is, that what with the tendency to sport, and to be cross impregnated naturally, an endless number of novel varieties might be obtained.

We have, however, arrived at the limit beyond which it is not proper to extend a single paper, therefore we shall, on a future occasion, notice the remaining groups of autumnal roses; and also say something on the seeding of roses generally.

## ON THE REPOSE OF PLANTS.

TO THE EDITOR OF THE FLORIST'S JOURNAL.

I FULLY agree with the remarks contained in your Journal of the 1st of February, on the application of water to plants; for, though very few flowering plants will grow without water, yet the greatest injury which they receive in artificial culture is produced by an undue supply of water, or giving it to them at improper seasons, of which the last is by far the most destructive.

It seems to be a general law of organic nature, applicable both to plants and to animals, that, in proportion as the time of repose is profound, the time of activity is vigorous. Nothing contributes more to weaken the energies and destroy the spirit of an animal, than continually disturbing and rousing it when it is asleep, or keeping it awake by artificial means when nature inclines it to be sleeping. The repose of plants is just as different from the sleep of animals, as the nature and habits of the one kingdom of organic nature is from the other; for the repose of plants is a perfect cessation of all the actions of vegetable life; while, during the most profound repose of an animal, the vital functions still go on. The state of animals which most nearly resembles the repose of plants is that to which the name of hybernation or wintering is given; and which, except in the very hottest climates, is common to all reptiles, and to various other animals, in cold situations and in very high latitudes.

When the animal is in this state, to which it is generally reduced by cold, its powers of motion, and even of sensation, are completely suspended; and there are many animals which, while they are in a state of hybernation, may be mutilated without being awakened, and cut in pieces without showing the least feeling of pain. Plants, when in a state of repose, are something similar; and though their state of inactivity appears to be produced by drought in tropical and warm latitudes, and by cold in polar and chilling ones, yet the absence of the action of moisture appears to be the grand cause of their repose, whatever may be the situation in which they grow, or the season in which they take their rest.

Different plants are, no doubt, differently affected by the application of water when they are in a state of repose; but there

is every reason to believe that the application of water at this time is injurious to them all, by keeping them in a state of partial, but untimely, excitement, which injures their growth, and still more their flowering, when the season of activity comes round.

Plants which in their natural climate have a season of perfect drought, or only such moistening as they receive from the evening dew forming upon them, are most seriously affected by the lodgment of water at the roots. They damp off, become covered with small parasitical fungi, or lose their leaves like deciduous plants, although naturally they are evergreens. This is very strikingly the case with the hard-wooded shrubs of Australia, Southern Africa, and similar places; and it is to such plants that the ignorant are most apt to give water at their own time, when they begin to look sickly, from want of air, cold chills, or other causes. It seems that such parties confound two things which are very distinct—an evergreen plant and an evergrowing one. There is, perhaps, no evergrowing plant but such as are ever-dying in another part of their structure, as is the case with the mosses on the more humid bogs; and the fact of their constantly dying at the under end while they are growing at the upper, shows that even they cannot stand the severity of being continually soaked in water. When the upper part of a plant in a pot and the surface of the mould, both have the appearance of being too dry, it very often happens that the sickliness actually arises from too much humidity in the under part; for if the plant is shaken out of the pot, the lower portion of the mould will be found over damp and clammy, and the more tender fibres of the roots in a state of decomposition, and reduced almost to jelly. If this has not proceeded too far, the plants may be kept alive, by trimming off all the roots to the quick, introducing a drainage of potsherds, with kindly loam over, barely moistened; stirring the mould on the surface of the pot; and, if the plant is of sufficient value, placing it in a moderate heat, and supplying an exceedingly small quantity of water, until it is again established; —but if this is done immediately before the natural season for the plant coming into action and flower, the growth will be feeble and the flowering bad. Therefore, plants which are supposed to be thus affected should be shaken from the pots with the mould in a ball, and examined during the winter; and if the roots have begun to decay from the stagnation of moisture about them, they

should be treated as above directed, planted in a moderate heat, and left to repose; and then the only mischief will be the throwing of the flowering rather onward into the season.

Every one who grows only a few snowdrops and crocuses in a little plot at the door, is well aware how necessary a season of dry repose is to the bulbs of these hardy flowers; and in proportion as bulbs are larger, are natives of warmer climates, and grow more vigorously when they are in growth, the process of drying is the more necessary. So well is this known by every grower, that he is perfectly aware that a complete deterioration of the appearance of the plants, and a destruction of the beauty of their flowering, would be the infallible result of his allowing the roots to remain in the ground year after year without water. When the bulb has been properly dried, it is not so much disposed to rot even in a damp outhouse, provided a drainage of little sharp sand is put round it, and the mould is not of too binding a nature.

Fleshy roots, and indeed all roots into which the substance of the plant retreats while the stem has dried down, follow exactly the same law. This holds true, not only in plants which take their repose in dry places, or in average soils, but even in those which grow in water. A friend of mine made a trial of this with the Nymphæeæ, or water-lily, and other aquatic plants. He took them up in the autumn, cleared them of mould, without wounding or injuring the roots, and laid them on dry shelves, where a temperature of nearly 60° was kept up, and there they lay through the winter. In spring they were taken and placed in the proper soil, and water introduced; and they not only grew, but grew more regularly and came into finer flower than if they had remained in water all the winter.

Indeed, I am strongly inclined to believe, and think I have sufficient ground for belief, that all plants, as well as parts of plants, which retain the vegetable life in an inactive state during part of the year—and this may be said to include almost the whole, are the better for a dry reposing, more especially with regard to their flowers and fruit. Where the stem dies down annually, the vigour of the plant retreats entirely into the root; where the leaves are deciduous, it retires into the root, stem, and branches; and even where the leaves are evergreen, the vigour is gradually withdrawn from these, and they become

deciduous when the young shoots and leaves make their appearance. In all these cases, whether the retreat is into a smaller or a greater extent of the plant, that retreat is accompanied by a consolidation of the sap or juice of the plant; and while this consolidation lasts, there is no growing action of any description whatever. Where plants are rooted in the ground, the roots have a less perfect ripening than the above-ground stem, and the moisture and heat radiating from the earth bring them sooner into action; for they extend their rootlets before a bud on the plant shows the slightest indication of expanding. If this winter growth of rootlets is too abundant, the plant becomes delicate, and always the more subject to injury the harder it is in the wood; because the growth of the under part of it becomes too strong for the upper part to bear.

The observant and reflective reader will not fail to see in this hybernating and consolidation of the sap or juice of plants, a sort of approximation towards the nature of seeds; the state in which all plants are most enduring, and least subject to injury. The time during which any individual plant can be kept alive is limited to not a very long period of years; but there are evidences of seeds having remained in the ground for considerably more than a thousand years without losing their vitality. Artificial culture, while it increases both the temporary growth and the beauty of flowering, invariably shortens the duration of the plant, and, indeed, makes it tender in its whole structure. Hence, in those exotics which are hybrid, the mother plants never last long in a healthy state; and the succession is kept up by cuttings, which, in very many instances, have to be removed every year; as, when properly treated, they flower at the same time as the mother plants. When seeds are obtained, either in this country or by importation, the plants are longer in coming into flower than cuttings; but they are more hardy and last longer, apparently from the repose which the plant has had while in the state of a seed.

Such are a few facts and inferences which have occurred to me in studying the repose of plants; and I hope they will be useful to some of the less experienced readers of the FLORIST'S JOURNAL.

C. D.

## THE FLORIST'S LETTER-BOX.

TO THE EDITOR OF THE FLORIST'S JOURNAL.

HAVING a large plant of Cactus speciosissimus intended for an exhibition at the end of June, the flower-buds just appearing, are they too forward for the above, and should they be retarded?

[N.B.—The plant is located in a warm greenhouse.]

The treatment of Nerium splendens to bring it into bloom?

And the best mode of raising Lysianthus Russellianus from seed, having tried several times without success?

R. W. C.

*Feb.* 23, 1842.

"R. W. C." The Cactus intended for exhibition in June had better be kept in a cool greenhouse till the middle of the present month, observing to keep it dry, at which time it should be removed to a gentle heat; for the first week or ten days it should be kept without water, after which a little may be given, increasing the supply as the flowers increase in size. The atmosphere of the place it is in should be kept moist, varying the supply of water and of sun; heat will give great command over the flowers; these it should be endeavoured to have open about two days before the exhibition, that time being necessary to get them of a good colour, for which purpose remove the plants, as soon as the greater number of flowers are open, back to a cool situation in the greenhouse.

*Nerium splendens.* Keep the plant cool and dry till the middle of May; then place it into a gentle moist heat; give but little water till it shows flowers; then, as the flowering increases, it must be watered freely, and frequently syringed.

*Lysianthus Russellianus.* The seed of this plant should be sown in July or August in shallow pans, the soil should be light, and the seeds barely covered. When the plants are large enough to handle, they should be potted singly into thumb-pots, and

placed near the glass; they require a large supply of air and light, and but very little water during winter; all the protection they require is merely to preserve them from frost. In March they require to be repotted, and this should be repeated as they grow, till they are placed in 48 or 32 sized pots; with this treatment the plants flower abundantly throughout the summer.

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TO THE EDITOR OF THE FLORIST'S JOURNAL.

SIR,—Being a constant subscriber to your Journal, I should be glad if you or some of your correspondents would favour me with a list of the sizes of all the flower-pots in general use, that is, height and breadth in inches.

AN AMATEUR GARDENER.

*March* 18, 1842.

"AN AMATEUR GARDENER." We give the sizes of pots as they are made near London. They vary much in different places; as those which are sold 60 to the cast in London are only 48 to the same in some parts of the country.

| | Height. | Breadth. |
|---|---|---|
| Thumbs .. | 3 inches. | 2½ inches. |
| Small 60 .. | 3 ditto .. | 2 ditto. |
| Large ditto .. | 3½ ditto .. | 3 ditto. |
| Small 48 .. | 5 ditto .. | 4½ ditto. |
| Large ditto .. | 5½ ditto .. | 5 ditto. |
| Small 32 .. | 6 ditto .. | 7 ditto. |
| Large ditto .. | 7 ditto .. | 7½ ditto. |
| Small 24 .. | 8 ditto .. | 8 ditto. |
| Large ditto .. | 9 ditto .. | 8½ ditto. |
| Small 16 .. | 10 ditto .. | 9 ditto. |
| Large ditto .. | 11 ditto .. | 10 ditto. |
| 12 one foot each way (only one size.) | | |

There are larger made, but these are all that are necessary in ordinary culture.

## CALENDAR FOR APRIL.

STOVE. Many of the free-growing plants and climbers require constant attention at this season of the year. Climbers should be frequently thinned and neatly tied in their places, and the leading shoots of fast-growing plants should be nipped off with the finger and thumb, and the shoots pruned out where too thick, for though it may be desirable to have them as near their native luxuriance as is consistent, yet any approach to a rambling growth must be avoided. Specimen plants should be forwarded by all possible means, many will be found to require repotting; this should be repeated whenever necessary; the proper drainage of plants should be an object of frequent attention; if a plant looks sickly turn it out of the pot and examine it, in nine cases out of ten it will be found to proceed from an imperfect drainage; use every exertion to preserve a moist atmosphere; saturate the paths two or three times a day whenever the sun shines warm; the plants should be syringed twice or thrice a week, this should be done early in the day to allow the plants time to dry before the evening. Erythrinas may now be potted and brought into this department, water them sparingly until they begin to grow; Amaryllis, Crinums, &c. require an increased supply, though care must be taken to prevent water lodging in their crowns; give air as directed for last month, that is whenever the thermometer rises to 70° of sun heat, but little fire heat is necessary if the house is closed early in the afternoon. Gesnerias may be started now.

GREENHOUSE. Finish repotting as early as may be convenient, some free-growing plants will require repotting again by the end of the month; this is the best month to repot small Geraniums to bloom at the end of summer and autumn. Fuchsia Fulgens, Salvia Patens, and Triverania Coccinea may be placed in a gentle bottom heat to start them, as also forward specimens of Cacti if an early bloom is desired: the present is about the best time to propagate Ericas; to do this take off the young shoots when grown about an inch in length, square the bottom end with a sharp knife; trim the leaves about half

way up the stem, but be careful not to bruise the stem, the pots they are placed in should be half filled with sherds; the soil should be one part fine peat and three parts silver sand; then a thin layer of sand on the top; press it down and insert the cuttings, separating the free-growing sorts from those which are more tender, give them a gentle watering as soon as planted; cover them with small bell-glasses, and place them on a cool shaded shelf; the old plants of Erica may be placed in a cold pit where they will grow more luxuriantly than in a greenhouse. Camellias may be propagated by all the methods now; Verbenas, Fuchsias, Salvias, Petunias, Heliotropes, &c. may still be propagated for turning out: cuttings of these may be taken as soon as they are an inch or an inch and a half long; plant them in small pots; place them in a brisk bottom heat, and give them a good supply of air while growing. Lobelias should be separated and potted. Climbers must be constantly attended; towards the end of the month some of the hardier kind of plants may be removed to make room for others. Chrysanthemums may be struck and the old stools turned out if not wanted again; thin out and stop all misplaced shoots on the plants generally; give a plentiful supply of air on every favorable occasion; water liberally when required, and syringe the plants about twice or three times a week, this keeps them clean and is conducive to their general health, though it should always be done early in the day. Insects must be destroyed on their first appearance; we recommend attention to what we said on them last month.

Shrubby Calceolarias strike very freely now and make flowering plants for the autumn. Gloxinias, Tropeolums, Liliums, and other bulbs not yet growing may now be started; those already growing should be frequently syringed. Oranges, Camellias, &c. may now be top dressed if they require it.

Flower Garden. This month the florist receives his first return for past attentions and months of unwearied diligence is rewarded first by the bloom of that beautiful spring flower the Auricula. During the first weeks of the month much attention is still necessary to bring the flowers to perfection; they require all the morning sun, and should be frequently watered, though always in small quantities; as the blooms expand the plant

should be removed to the stage; this should stand open to the east that the plants may receive the morning sun, but should be shaded by 10 or 11 o'clock. Choice Tulips should be protected from heavy rain or squalls; though the covering should not be used except in extremely severe weather, lest the plants should be drawn up weak. Picottees and Carnations should be placed in the blooming pots, or planted out where that method is preferred: also plant out Pinks and top dress those already out. Pansies should be planted out; cuttings may be taken for autumn flowering; Polyanthuses require the treatment recommended for Auriculas; top dress Anemones and Ranunculas where it is requisite; continue to propagate Dahlias, those already struck should be potted off and placed in a cold frame to harden; plant Bengal, China, Bourbon, and Tea-scented Roses; plant out a few stocks and other annuals, and sow again for succession; repot Balsams, Amaranthus, and other tender annuals, except Cockscombs, these should remain in small plots till they show flowers; those half-hardy annuals in frames and pots should have an abundance of air. Finish sowing Biennials and Perennials; Hyacinths and Bulbs should have their flower stems supported with sticks; the planting of evergreen trees and shrubs should be forwarded as expeditiously as possible that it may be completed by the end of the month; prune, tie, and nail creepers and other plants requiring it; rake the flower beds and borders and make everything neat about the garden; roll lawns frequently, if the weather is open they will require mowing by the end of the month; plant and cut Box edgings, as also edges of Laurel, Privet, Yew, &c. &c. In preparing the flower beds for the reception of plants, it would be well to make a rough sketch of those to be planted, and mark the spaces intended for each plant or kind of plant to occupy; these spaces might be coloured the same as the plant intended to be placed in them, and thus the effect would be seen before planting, and might be altered if not agreeably placed the first time. In some situations greenhouse plants may be turned out by the latter end of the present month, but we consider it preferable as being much safer to defer it till the beginning of May.





Alfred Adlard

CAMELLIA JAPONICA.

THE MONARCH.

London, How & Parsons, May 1, 184..

THE

# FLORIST'S JOURNAL.

MAY 1, 1842.

## THE CAMELLIA.

WITH AN ENGRAVING OF THE MONARCH.

WE have much pleasure in embellishing our work this month with a portrait of one of the very best varieties of that beautiful genus the Camellia, and are happy to find the attention of our leading floriculturists again turning to these lovely plants. All-sufficient as they are to warrant the warmest encomiums, we cannot pass over the notice of some of their peculiar beauties: in point of colouring, either for warmth or delicacy, they may vie with any even of our choicest exotics; in size, in strength, beauty, and durability of foliage, in general appearance, and in their robust constitution, in all these essential points they have scarcely a compeer; in fact the Camellia appears to have but one assailable side, which is the absence of a sweet scent, and even this objection we are almost enthusiastic enough to believe might with attention and in time be removed; yet even now, considering the fallibility of everything (to affect the philosopher) in this sublunary sphere, it must be confessed the Camellia approaches very near the ne plus ultra of plants, and we pleasingly anticipate the time when we shall see them the recognized inhabitants of the American borders in the open air or dotted on

lawns, rivalling the rhododendron, for we fully maintain that although they have been known since 1740, their constitutional habits have never been fully or fairly tried.

Our present illustration, The Monarch, was obtained by Mr. Hally, nurseryman, Blackheath, from seed accidentally saved from the old double-striped variety, and has all the good qualities of that still valuable kind more strikingly developed; the ground colour is a brilliant scarlet, reticulated with deep crimson veins, generally spotted more or less with white; but this spotting, Mr. Hally remarks, depends greatly on the preceding year's treatment, of which we shall speak presently; but first we must beg to call the attention of our readers to the advantages derived from a proper attention to raising of seedlings. This is a branch of gardening particularly suited to amateurs, and in which they may very far excel all others; it matters not what are the subjects chosen, they may be camellias or carnations, or anything else that is suited to the conveniences at hand, but it is in this the cultivator may signalize himself. We have before remarked on the pleasure derivable from this course, and are convinced no person who once commences the pursuit ever resigns it willingly; we shall enter more fully into the subject of raising seedling camellias after giving the general culture of the mature plants.

The camellia, as is well known, is much cultivated in the northern parts of China and Japan; there are only five species known to us, two of them, C. Bohea and C. Viridis, are those usually grown for the domestic drug tea; C. Japonica is there as with us a very favorite ornamental shrub; besides these there are C. Sasánqua and a double variety of the same, both ornamental, but not so much so as C. Japonica. The first two, or tea plants, are seldom retained in our gardens except as botanical curiosities; and Sasánqua, though pretty, is greatly inferior to Japonica, which consequently supersedes it; and from this species all the varieties which at the present time grace our conservatories have been derived.

In giving the culture of this species, we cannot do better than use Mr. Hally's words, as he is at the same time an extensive and eminently successful cultivator; the first point touched on is that we before mentioned, the manner of drawing out the colours in the most eminent degree of those which are naturally

variegated, as in the case of the Monarch, Chandlerii, the double striped, and some others.

He says: "To blotch them plentifully with white, they should be forced pretty freely the preceding spring (after they have done flowering), kept a very little dryer than usual, and freely exposed to the sun after the young wood has ripened; indeed, if camellias be perfectly healthy and sound at the root, and have a plentiful supply of water, they will require no shade at all; it is only when they have been much exposed to the action of frost in the winter that it is required, in which case they should be shaded from the hot May sun till the young shoots are pretty well ripened. It may be taken as a general rule, that if the frost in the winter produces a transparency towards the centre of the leaf, the rays of the spring sun, if suffered to bear upon it, will generally turn the parts brown that have been so affected, and the leaf will drop. Plants, however, that are not in a free state of growth will seldom suffer in this way; four or five years is the average longevity of the camellia leaf, and with good management it may be kept green and healthy a year or two longer, though we often see the plants, when they have not had due attention, carry but one or two years foliage, these, except when in bloom, have an unsightly appearance.

"The soil I have found most proper for camellias depends in a great measure on their age: for seedlings or young cuttings intended for stocks or otherwise, when first potted off, I use good fat bog mould, fresh dug, broken rough with the turf and film adhering, mixed with a little white sand, taking care to have a good drainage by filling the pot about one fourth with well-shaken turf. I never allow but one piece of broken pot laid hollow over each hole in the pot, for unlike the Erica or Epacris, which delight in shallow soil with a loose bottom, the natural abode of the camellia is in a deep rich soil, consequently, I have always found the roots perish as soon as they get into a handful of small potsherds, which some cultivators put into the bottom of the pot. At the next shifting I mix a little light turfy loam with the peat, and at each successive shift increase the proportion of loam; and for old plants, I use about an equal quantity of loam and bog mould.

"A collection of Camellias may be kept in bloom from

September till the succeeding May by the following treatment: Pick out those you wish to blow late of the backwardest plants the latter end of March or beginning of April, before the wood buds have started, and set them out of doors in a sheltered situation, there let them stand throughout the summer. If not too forward when put out, they will not commence growing until late in the season, and the flower buds will not be formed before autumn; these for the most part, if kept in a cool house through the winter, will not bloom before the following April or May. Those required to bloom early in autumn should be placed in March, or soon as they have done blooming, in a forcing house, and kept in a good heat, plentifully supplied with water, both at the root and over the foliage, by syringing, increasing both heat and light as the young wood ripens, after which they should be removed back to the conservatory or greenhouse, where they may remain the rest of the summer. The intermediate succession to flower through the winter should be kept constantly in the conservatory, where they should be frequently syringed, and every means used to promote a healthy and vigorous growth during the early part of the season.

"Those chosen immediately to succeed these may be selected from the intermediate succession, and turned out of doors as soon as the young wood is well ripened, which is usually in July; they may stand out until the middle of October.

"Care should be taken to guard against any sudden change to a colder temperature, either while the plants are making new wood or after the flower buds have arrived at their full size; in the first case it would spoil the appearance of the plants for a year or perhaps two, and in the latter the buds would most likely drop; and so also any sudden excitement should be equally guarded against, such as repotting, or giving much water at a time after they have been suffered to get dry. On these particulars depend almost the entire success of the cultivator; that the camellia requires a little extra heat to cause it to produce both wood and flowers with any degree of luxuriance is an indisputable fact, and it is in the application of such heat that the entire account of success or failure depends. The growing season follows closely on that for the production of flowers, and it is then the plants require their first seasonal excitement; this

is caused first by repotting, and secondly by placing the plant in a little higher temperature than that in which it produces its flowers."

Mr. Hally says the best seasons for repotting are either immediately after flowering, or as soon as the young wood and leaves have become firm enough to handle without injury. Now, as we before remarked, it is in the production of the new wood that the first stimulus is required, so that if the plants are repotted immediately after flowering, the benefit of the new soil goes at once towards the formation of a new and vigorous growth; one of the most essential things in the cultivation of this or any other plant, and on this account we greatly prefer the first of the times mentioned as the season for repotting.

If the repotting is left till the seasonal growth is completed, the increased stimuli must then be placed to the account of the flowers; but we entertain some doubts if the flowering can be strong unless the growth of the plants has been so in a corresponding measure; and to repot at the latter season, although we know it to be the practice with very many cultivators, appears to be throwing the excitement into the flowers totally at the expense of the wood; and it does not seem reasonable to suppose the roots can derive much nourishment from the old soil at the period of the spring growth, from the great length of time it has supported the plant, it must be then completely exhausted.

With respect to the excitement necessary for the production of flowers, it must be observed, the increased heat should be continued from the first appearance of the buds till the full development of the same; but it must not be carried beyond it, as camellia flowers do not last long in heat, nor do they even open well if it is too strong. Water, too, is a principal agent at both periods, and more especially at the latter, for if the plants are not regularly supplied while the buds are forming, nearly the total fall of them is the immediate consequence.

We now come to the propagation of the Camellia. Established varieties are increased usually by grafting or inarching on the stock of some inferior variety; they are sometimes also raised from cuttings, but this is rather a tedious and no ways certain method; the cuttings are taken off as soon as the young wood is pretty well ripened, and prepared in the usual manner, and then inserted in a pan filled with sand and peat in equal quan-

tities, and placed in a pit or cold frame; they do not grow till the following spring. The better method is by grafting; for though inarching may be simpler in the operation, it never forms so good an union: for grafting, the stocks may be raised from cuttings, as before directed, or what is better, from seed: and here the cultivator has a double chance, for if the seed is selected from good semidoubles or from the double varieties, in all probability he will originate a new and perhaps a good sort; but even when this is not the case, the plants so raised form the very best stocks for grafting the superior kinds on. The mode of grafting usually employed is the common side graft; it should be done just as the plants commence growing: in forming the graft, the usual slit or cleft may be omitted, the object of it being to keep the scion firmly in its place, and to prevent its being disturbed by wind; but in this case, as the operation is done indoors, it is unnecessary. Care should be taken in fitting the two cuts, that they may unite evenly, for if not done neatly at first, it remains an unsightly object ever afterwards. The stock may be from three to seven or even ten years old; but the scion should be a well-ripened shoot of the current year's growth. After the operation is complete, the plant should be placed in good heat, and covered with a handglass; they generally unite with facility. With respect to the raising camellia from seed, it is a subject we would recommend to every one possessing a greenhouse: the seed should be sown as soon as ripe, which may be known by its turning a deep brown colour; the soil should be light bog mould and white sand: if the pots are plunged in a pretty strong heat, the seed will generally vegetate in a few months, but they will sometimes lay two years, so that the earth should not be disturbed till the whole of them are up; as soon as they have attained two or three leaves they may be potted off, and treated nearly the same as mature plants, bearing in mind the difference in constitution, and of course they do not require any excitement to bloom for the first two years. By this time they will have grown from two to three feet high, and the third season many of them will flower. None of them should on any account be used for stocks or destroyed till they have bloomed.

Now, though four or five years may at first sight appear a long time to wait even to determine whether the plants will prove worth keeping as individuals or not, yet we feel certain the person

who once blooms a seedling plant of his own raising, will feel himself amply repaid for all his trouble, and what might appear the almost incredible extension of his patience.

When we began this article we intended to have gone fully into the subject of the probable chances of success attending or likely to attend the cultivation of Camellia in the open air; but as it is a subject which will require a full and free enquiry, and of too much consequence to touch on slightly, we must be content with just hinting it to our friends, and reserve the further consideration of it to another paper; only this we would beg of those who have duplicates of sorts, and who feel an interest in the promotion of floriculture, to endeavour to ornament their parterres with this lovely genus. But we shall revert to the subject again before the season for actual trial, when we intend to furnish our readers with a descriptive list of the best varieties of the Camellia.

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## ON THE CULTIVATION OF THE GENUS MAXILLARIA.

(Continued from p. 80.)

*Maxillaria Christata.* This is a splendid species, and also a very rare species. The flowers are large, of a very rich colour, with crimson stripes; the petals white, with crimson spots; the lip is beautifully crested, the crest being composed of white hairs; the rest of the lip is striped with white and crimson; the pseudo-bulbs are rather small and green, the leaves two to each pseudo-bulb, which are lance-shaped, of a pale green colour; the flower-stem comes out from the base of the pseudo-bulb, and bears from two to three flowers on each stem, and when the plants are strong they bear as many as three to four flower-stems from each pseudo-bulb: when that is the case this is really a very beautiful plant. This species does best on a log of hard wood: the flower-spikes are pendulous. No person can have any idea of the beauty of this plant unless they see it in flower. A native of Trinidad, introduced in 1834.

*Maxillaria aureo-fulva*, gold and brown. Pseudo-bulbs are somewhat four-angled, of a greenish brown colour; the leaves lance-shaped and pointed; rather long footstalks; the leaves are of a reddish green; the spikes of flowers come from the base of the pseudo-bulb, which bears from five to ten flowers on each spike; the sepals are of a brown colour, while the petals are of a golden colour; the lip is golden, with a dark crimson spot in the centre. This is a very lovely species. A native of Brazil, introduced in 1837.

*Maxillaria racemosa*. This is a very pretty little species; the pseudo-bulb is also four-angled, of a dark green; the leaves are ovate, lance-shaped, and pointed, on rather long footstalks; the sepals are brownish white, the petals are of a straw white; the lip is straw, with brown spots, rather hairy in the inside. A native of Brazil, introduced in 1825.

*Maxillaria Vitellina*, another very pretty species. The leaves are lance-shaped and pointed, on rather long footstalks; the flowers are borne on very slender flower-stems, and are upright till the flowers begin to expand; then they droop a little, which gives the plant a very graceful appearance when in flower; the flowers are of a rich yellow, approaching to gold. A native of Brazil, introduced in 1838.

*Maxillaria tenuifolia*, slender leaved. This is a most beautiful species; the pseudo-bulbs are of a small ovate form, with one leaf at the apex, which is long and slender, and bent back in a graceful form; the pseudo-bulbs are all sheathed at the base with very short leaves; the pseudo-bulbs are, with the leaves, of a dark green colour; they have rather long rhizomas, from the sheathing of which spring the flowers, which are very pretty; the sepals and petals are of a straw yellow, with a few spots of crimson; the lip is most beautiful, being nearly one mass of crimson, which makes a fine contrast with the sepals and petals; the flowers come singly, but as many as four or five come from each pseudo-bulb; when the plant is strong, it is a lovely object. Native of Mexico, introduced 1837.

*Maxillaria tetragona*, four-sided. This is a most singular species, and also very beautiful. The pseudo-bulbs are four-angled, of a brown colour, broad at the base and tapering towards the top; the leaves are ovate, lance-shaped, and pointed, of a rusty green colour; the pseudo-bulb has only one

leaf to each and the footstalks; the flower-spike is short, and proceeds from the base of the pseudo-bulb, and is very short and densely crowded with very large flowers; the sepals and petals are of a brownish green; the lip has blue purple spots, and has the appearance of a jug, which is very curious. Take it altogether, it is a very handsome plant: the smell is very strong, and not very agreeable. A native of Brazil, introduced in 1827.

*Maxillaria Barringtoniæ.* This is a very large species, and very handsome when well flowered. The flowers are large, and of a greenish white; the lip is somewhat yellow; the pseudo-bulbs are ovate, of a light green; the leaves are ovate, on rather long footstalks. This species does not produce more than two or four flowers from each pseudo-bulb. This is a native of the West Indies, introduced in 1790.

*Maxillaria picta*, painted. This species is, in fact, one of the most beautiful of the whole genus, beautiful as most of them are. The flowers of this are somewhat yellow, with beautiful dark crimson spots, or rather blotched with dark crimson; the pseudo-bulb is ovate, of a dull olive green, having two leaves at the apex somewhat coneaceous, of the same colour as the bulbs and somewhat flaccid, and towards the apex bent back; the flowers come out from the base of the pseudo-bulbs, having only one flower on each stem. It is a very free flowerer. A native of Brazil, introduced in 1836. There are a great many varieties of this species.

*Maxillaria stenopetala*, narrow-petaled, a very handsome species, and an abundant flowerer. The flowers are about half the size of picta; they are of a whitish yellow, beautifully spotted with purple; the pseudo-bulbs are ovate, of a rather dark-green colour; the leaves are two from each pseudo-bulb, which are linear, lance-shaped, and very slender. A native of Demerara, introduced in 1836.

*Maxillaria Skinneri.* This is a noble species; it has a fine habit. The leaves are large, and the pseudo-bulbs of a rich light green. This species comes nearest to Deppei, but has flowers three times as large as that species, leaves and pseudo-bulbs, also the sepals and petals are white and green, and the lip is white, yellow, brown, and orange. This species is

equal to any of the genus; it throws up a number of flowers. from the base of the pseudo-bulb, which are single on peduncles. A native of Guatemala, introduced in 1840.

| Generic Name. | Specific Name. | Colour. | Country. | Year. |
|---|---|---|---|---|
| Maxillaria | Abba | white | Jamaica | 1836 |
| ,, | Densa | white | Xalapa | 1828 |
| ,, | Micrantha | white | Demerara | 1836 |
| ,, | Henchmannii | varied | Demerara | 1836 |
| ,, | Variabilis lutea | yellow | Ouxaca | 1836 |
| ,, | Variabilis media | yellow | ,, | 1836 |
| ,, | Variabilis purpurea | purple | ,, | 1836 |
| ,, | Mackai | white purple | Gautemala | 1839 |
| ,, | Sinuosa | white purple | Demerara | 1836 |
| ,, | Uncata | yellow | Demerara | 1836 |
| ,, | Pamila | white purple | Brazil | 1836 |
| ,, | Subulata | dark purple | Brazil | 1836 |
| ,, | Acicularis | dark purple | Brazil | 1836 |
| ,, | Madida | yellow | Brazil | 1836 |
| ,, | Crassifolia | straw | Brazil | 1836 |
| ,, | Crocea | straw | Brazil | 1835 |
| ,, | Candida | white | Brazil | 1840 |
| ,, | Decoma | white | Mexico | 1837 |
| ,, | Pallens | pale yellow | Demerara | 1836 |
| ,, | Acutiflora | purple | Demerara | 1836 |
| ,, | Glauca | yellow | Guiana | 1836 |
| ,, | Curta | yellow | Brazil | 1837 |
| ,, | Cucullata | white | Demerara | 1837 |
| ,, | Cucullata palida | pale | Ouxaca | 1836 |
| ,, | Pomeeter | purple | Brazil | 1838 |
| ,, | Harrisoniæ alba | white | Brazil | 1840 |
| ,, | Marginata | yellow purple | Brazil | 1837 |
| ,, | Picta pallida | pale | Brazil | 1836 |
| ,, | Picta major | yellow purple | Brazil | 1837 |
| ,, | Punctata alba | white | Brazil | 1838 |
| ,, | Punctata purpurea | purple | Brazil | 1839 |
| ,, | Centiginosa | purple | Brazil | 1838 |
| ,, | Collegi | brown | Demerara | 1836 |
| ,, | Pallidiflora | white | St. Vincent | 1835 |
| ,, | Squalens | purple | Rio Janiero | 1835 |
| ,, | Decolor | white | Jamaica | 1835 |
| ,, | Foventa | brown | Guiana | 1839 |
| ,, | Warreana nubescens | reddish | Brazil | 1838 |

## ON THE CULTURE OF GARDENIA.

THE GARDENIA was so named by Ellis in honour of his friend and correspondent, A. Garden, M.D., of Charleston, in South Carolina; it is a very beautiful genus, and most of the species are highly odoriferous.

G. Radicans is a well-known and very favorite greenhouse shrub; it is a native of China, and was first grown in England in the year 1804. As a greenhouse plant it has scarcely a compeer in fragrance or beauty; in its native country, too, it is very highly prized. The Japanese, as Thunberg relates, form hedges of it, and ornament their houses and the walks of the gardens with it and other species of Gardenia. This is one of the very limited class of plants suitable for window culture, and there are only three of this genus which bear the character sufficient to warrant the prenomen: these are G. Radicans, G. Thunbergia, and G. Rothmannia, the remaining species are all properly stove plants. A difficulty is often experienced in the blooming of these plants, more especially the greenhouse kinds; sometimes the plants do not produce any flower-buds at all, and others may bring a sufficiency of buds; but they as often fall prematurely, much to the disappointment of the fair owners, for this genus is a most decided favorite of the ladies.

It may be useful to endeavour to trace the cause of this premature fall of the flower-buds, as the knowledge of the true cause of a failure is the first and most essential step towards the application of a remedy; these plants, when in a state of nature, inhabit a portion of the globe where the seasonal changes are very great, and consequently the seasonal growth of plants equally marked. Indeed, so severe are the winters in some parts of the eastern world, and the effect of this tending to render the plants constitutionally robust, that was it not for the greater humidity of our climate, we might be justified in the expectation of acclimatizing all the plants of those countries. The effect of this has been already explained in the Florist's Journal, therefore what is now required consists chiefly in a practical view of

the case. The plant, when placed in a room as a window plant, is subject to one undeviating atmosphere, the temperature of which is kept as nearly the same as possible, and through a mistaken kindness, supplied with water just as regularly; this is clearly the opposite of the plant in its natural state, for then during the summer months it has the full influence of the sun, with the benefit of the free air; and in winter, its only advantage is its annual covering of snow, just sufficient to protect it from the effects of frost, and which yields but very little humidity until it becomes thawed; and the same cause, namely the power of the sun, which supplies the plant with moisture by dissolving the snow, acts immediately on the energies of the plant, throwing it into a growth as luxuriant as it is sudden, and it is by this the treatment of the plant when in an artificial state should be regulated.

In the autumn, let the supply of water be gradually but certainly diminished, giving at last only just sufficient to keep the earth in the pots together; this should be continued from October till March, then let them be placed in a very gentle hotbed, if at hand, or in a warm window or part of the greenhouse, but the frame is the best, the heat of which should be about 55°; the plants must not be plunged into but merely placed on the bed, and from this time increase the supply of water and air, and a good bloom will be the result. After the plants have done flowering, they should be repotted in a mixture of loam and peat, or loam and old leaf mould, and then place them out of doors, shading them for a few days from the intense heat of the sun till they become re-established, after which they should have all the sun they can get to ripen the wood, observing to give them plenty of water while growing. By the end of September they should be removed into the house, and the autumn treatment repeated.

The remaining species are all, strictly speaking, stove plants; the finest of them is G. Florida, with its variety flore pleno; these all delight in a mixture of loam and peat, with the addition of a little fine silver sand: a good drainage is always requisite. The season for repotting is immediately after flowering; they should never be overpotted, as they always grow best when the roots are touching the sides of the pots; after repotting they will be benefited by being placed in a cool part of the green-

house: these like the others should be allowed to become dormant during the winter months, and started again in February. They may all of them be propagated by cuttings taken off in June and planted in a pot of sand and peat, and plunged in a very gentle bottom heat, covering it with a small cap glass; they strike readily, though some care is necessary to keep the glasses dry, they should be wiped once or twice every day, and all symptoms of mouldiness removed.

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## THE APPROACHING FLOWER SHOWS.

We are now entering on a period of the most intense interest to the florist, and to the general cultivator also, but more particularly to the florist, the period of the flower shows—the time in which he is to receive the reward for all past trouble, a time looked forward to with the pleasing anticipation of triumph, not unmixed with some anxiety though; yet this anxiety is not of that painful nature which characterizes the feeling when applied to the every-day occurrences of life; a good deal might possibly be learned from a close examination of the nature and character of this same anxiety. What renders it less painful and so of a more amiable character, with all the other et ceteras, from it we imagine a good moral lesson might be derived; but as we are not about to write an essay on morals, but merely to speak a few words about the approaching shows, we shall not enter farther into the discussion. We anticipate a very great share of pleasure this season at the various metropolitan shows, for from what we have heard whispered and seen, we expect there will be some very close competition for some of the principal prizes; some of the new flowers, too, are likely to prove perfect gems. Our readers may depend on our unceasing efforts to obtain the earliest and fullest description possible of such as may appear most worthy of notice within our own sphere of action; and it

is to ask the cooperation of florists in more distant parts of the kingdom that we now write. We shall feel grateful to all Secretaries of Societies who will furnish us with reports of their shows, and we invite them to a correspondence with us—anything in our power shall be done cheerfully: most particularly, we beg that all reports may be accompanied with the names of the winning flowers, as from the data we intend most carefully to collect during the season; of all kinds of florist's flowers we anticipate furnishing our readers with such a table of reference that we trust will in a very great measure prevent many from falling into that most unpleasant difficulty, disappointment from the selection of flowers.

We know that a description of a flower given in an advertisement or otherwise by the grower or any person interested in the sale of it is often viewed with suspicion, whether justly or not we do not pretend to determine. Neither do we wish to exalt ourselves as judges infallible, nor expect the existence of a flower or plant is to depend on our approval; but this we think that we can make our Journal of as much use to the connoisseur as to the tyro, and especially to those of our friends who may reside in the country, by noticing the recurrence of every good flower and the situation in which we may find it; the amateur may then form an opinion of the qualification of any new addition to his favorite flower when he may not have had an opportunity of personally inspecting it, and the beginner will be put in possession of a guide to the selection of any flowers he may wish to grow; but to do this effectively requires the assistance of many, and we again solicit, not doubting we shall receive the assistance of all interested in the subject.

While on the subject of correspondence we beg to reiterate a remark made at the beginning of our work, that the pages of the Florist's Journal are open to any enquiry or remark calculated to promote or increase the knowledge of floriculture: "We shall always be ready to answer questions, clear up doubts, or put our readers in possession of any information which they may desire, and we and our cooperators can supply." (*See Preface to Florist's Journal.*)

## ON THE PASSIFLORA.

THE PASSION FLOWER, though not exactly a florist's flower, is certainly deserving a notice in the Florist's Journal, as well for its great beauty as for its docility in cultivation. This genus, in our opinion, offers very great inducement to the experimental cultivator, from the facility with which hybrids may be obtained from it, a subject of the greatest interest to us, and one which we think well deserving the attention of every gardener. We are all well acquainted with the vast improvements that have been made in the class of flowers denominated florist's flowers, and reasoning from analogy, why should not the same or similar improvement be extended to other plants and flowers with as great success as has attended the trial with those. Always keeping this in mind, we intend from time to time, as opportunity may occur, to present to the notice of our readers such plants or families of plants as may appear to us to offer the most reasonable chances of success; and with this view we begin our article on the passion flower. It has already been made to produce one or two hybrids of the greatest beauty, well repaying the trifling trouble occasioned. Much, very much, may yet be done with this genus, not only in the improvement of the flowers but also towards acclimatizing some of the best varieties. It is the type of the order Passifloreæ in the Jussiean system, and is placed in the class Monodelphia, order Pentandria, of that of Linnæus; it is so called on account of its being supposed to represent in the appendages of the flower the passion of the Saviour. The genus consists entirely of climbers; some species are odoriferous, others bear edible fruits, and all of them very handsome. We shall mention a few of the most prominent, first remarking that with only three or four exceptions they are all equally suitable ornaments either of the conservatory or of the stove, that is when grown solely as ornaments; but when grown for the fruit, which of many of the species is very delicious, or for the purpose of hybridizing, a stove or very warm greenhouse is necessary. Most probably the latter would be found to answer, as they blow at a season when the greater number of plants are re-

moved to other situations, and so would allow of keeping the house warmer than is ordinarily done.

The soil they most delight in is a good sound turfy loam, enriched with well-rotted hotbed dung; nor must they be allowed to grow too luxuriantly, if seed is an object sought; they may be grown in very large pots or tubs, though to plant them in the border of the house is by far the most preferable method. The plants should be occasionally syringed during the growing season to remove dust and prevent the approach of red spider, though they are but little subject to the attacks of any insect if kept in anything like a healthy state. The hardier species are those we should choose for the purpose of impregnation, as likely to impart a hardy constitution to the hybrid; they are:

P. Cœrulea; P. Angustifolia; and P. Chinensis.

Of the other and more tender species the finest are:

| | Colour. | | Colour. |
|---|---|---|---|
| P. Cuprea | Orange. | P. Quadrangularis | Red, white & green. |
| Maliformis | Red, white, & blue. | Racemosa | Red. |
| Alata | Blue, red, & green. | Kermesina | Blue, red, & green. |
| Loudonia | Red. | Picturata | Purple. |
| Incarnata | Rose. | Serratifolia | Pink & green. |
| Laurifolia | Red and purple. | Cerulea racemosa | Blue & red. |
| Alata cerulea | Variegated. | Edulis | White. |

There are many others, but this selection will suffice, for either ornament or improvement. P. Cerulea racemosa is an hybrid raised by the late Mr. Milne, of Fulham, and is considered to surpass in beauty almost all the natural species; it is well suited for a greenhouse climber, but will not stand the severity of our winters in the open air. Alata cerulea is another hybrid of great beauty, obtained by Mr. Masters, of Canterbury, from seed of P. Alata of the West Indies, impregnated with P. cerulea; the same may be said of this as of Cerulea racemosa, it will not succeed when planted in the open air. Now though an hybrid obtained from a cross between a hardy species and one that is tender does not appear to be strong enough to withstand our winters, yet there seems to be every probability of a successful issue if the hybrid so obtained was again crossed with a hardy species. That those hybrids will seed we have had proof, and

we know a successful attempt was made with a similar cross in the case of the Rhododendron; there after several trials with crosses from Arborea and hardy species, none would stand the winter till those hybrids were again impregnated with hardy kinds, it seeming to require two removes from the tender parent before the robust constitution required could be obtained. Such we imagine to be the case with passion flowers; but independent of this increase of outdoor varieties, the which we consider though to be the most desirable point, from their peculiar adaptation for the covering of arbours and other ornamental spots, and from the great addition that would then be made to the enjoyment of their beauty and fragrance; but independent even of this, much might be done among those which are and would still continue to be tender; there is room for the introduction of improvement, either as seedlings or in an improved mode of culture. We should certainly think no collection complete that did not contain two or three species at least, though we would never advise to have more than one of a sort in every greenhouse; there is always some spot that may be found to which they will lend a great share of beauty.

As we have mentioned the raising them from seed, it will be expected that we state the mode of doing so; it is this: when the fruit is ripe the seeds should be taken from the pulp and dried in a piece of soft paper; if there is a stove in the establishment they may be sown directly, but if no place of the kind is at hand to keep them in through the winter, it will be better to defer the sowing till the following March; then sow in deep pans, using a light though rich loam to sow in, place the pans in a pit or frame with a medium heat, say about 65°, give them a gentle watering when first placed there, and repeat it when necessary; but they will not require any till they appear above ground; air must be given to prevent them drawing up weakly, and when about two inches high remove them to a warm shelf, near the glass in the greenhouse; let them remain here till June, when they may be placed in the open air; let them remain out till the plants are housed for the winter, observing to keep them moist; when taken into the house again they should be potted off if they seem to require it, but if they are not too thick they had better remain undisturbed till the spring, when they may be potted into large pots or turned into the borders of the house.

We should not advise placing any of them permanently in the open air till they have bloomed, or indeed till there were duplicates of any that might appear to possess desirable qualities.

Several species are well worth cultivating for their fruit; the first of the edible sorts is P. Maliformis. The fruit of this is about the size of an apple, of a yellowish colour when ripe, and contains a very sweet pulp, which is the eatable part in all of them. This is the Granadilla of the West Indies; when grown for fruiting it should be planted in the border of a stove, and trained upon a trellis near the glass: a good crop may be expected the second season after planting.

P. Quadrangularis is a very free fruiting kind; the fruit is pale green, when ripe is larger than that of Maliformis; the flavour of it is luscious and gratefully acid. It should be planted like the other in the border of a stove, and trained on a trellis or against the back wall, and should be freely pruned, as from its luxuriant growth and the size of the leaves some difficulty is sometimes experienced in ripening the fruit; we have succeeded in obtaining fruit from plants grown in pots, though the quantity is necessarily less.

P. Laurifolia is rather more difficult to fruit; but when in a favorable situation the fruit is very fine: it is about the size of an egg, yellow when ripe, and when fit for gathering is dotted over with small white spots; the flavour is peculiarly aromatic, with a very pleasant acid; it should be grown close to the glass, and the warmest part of the stove allotted it.

P. Edulis is much easier to fruit than either of the foregoing; it will succeed when planted against the back wall of a warm greenhouse, and with very moderate attention produce a plentiful crop of very fine flavoured fruit. It should be kept moderately thin, but yet does not require so much pruning as some of the other species. The flowering of all the species commences in May and continues till September, the fruit setting the whole time; this may be assisted by applying the pollen to the stigma with a feather, and thus ensuring a crop.

P. Incarnata may be fruited in a stove with great ease; the fruit when ripe is of an orange colour, the pulp or juice is yellow and very sweet. The seedlings of this species produce fruit the first season, which would make it a desirable kind for the purpose proposed in the beginning of this article.

The winter treatment of these plants is nearly the same: let them be grown for what purpose they may, the heat applied should be lowered sufficiently to stop the growth, when the plants should be closely pruned; they will be found to produce finer shoots, and more freely from the old wood than from that which is one or even two years old. They should be kept dormant till the following March. In conclusion we may remark that to those who are fond of rare fruits for the dessert this genus will be found useful, as, in our opinion, if allowed the end of a low house, and trained in the manner of forced peach trees, an abundant supply of fruit might always be ensured.

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## THE ROYAL SOUTH LONDON FLORICULTURAL SOCIETY.

This Society held their first show for the season on Wednesday, the 20th of April, at the Horns Tavern, Kennington, on which occasion two silver cups were competed for: the one, presented by Her Majesty the Queen Dowager for the best collection of miscellaneous plants, was won by Mr. Atlee, gardener to J. Beaufoy, Esq.; his plants were well grown and exhibited a very healthy appearance, though not quite so *recherche* as we anticipated. Among them were two finely grown and blown Azalea Indica alba; two Acacia armata; Goodia pubescence, Epiphyllum speciosa, and Ackermannia; Boronia senulata; Erica mundula; a very fine Rhododendron Smithii, which stood next the centre plant, Cytissus racemosus. Mr. Bruce's collection contained a very good plant of Azalia pulchella, Pultenia stricta, Polygala oppositifolia, Elichrysum humilis, Dillwynia glycineflora, Clivia mobilis, and good specimens of Erica mundula and grandinosa, and an Erythrinum cristi galli in good bloom. Collections were also shown by Messrs. Pawley, Coutts, Jackson, and Fairburn, each of them containing well-grown plants in excellent condition; but very little to notice as new or scarce in either of them.

Messrs. Chandler exhibited a new and beautiful species of Camellia, an imported one. It is called Nitida; the seeming

habit of the plant is dwarf and branching, the foliage rather small, as also the flowers, but of exquisite shape and great regularity; the colour a shaded crimson and white stripe. Mr. N. Gaines had a small collection of seedling Rhododendrons, which were very much and deservedly admired: one variety, carrying a fine bold truss of clear white flowers, finely mottled with red, was very conspicuous; as also another similar variety, in which the white was beautifully shaded with deep rose: his Cineraria ne plus ultra was very fine, colour bright pink and white. Mr. Ivery had a collection of his seedling Cinerarias; among them were Queen Victoria, the best white we have yet seen; Imperial Blue; Rival King, of excellent habit, colour deep rose and white; Iveryana is small, free bloomer, colour deep pink, well suited for bouquets. The best specimen plant was Mr. Jackson's Erica elegans; the second prize for specimens was taken by Messrs. Dickson's Erica Aristata Major, which were very good.

The Auriculas were never in better order. The show of them was very fine and attracted universal admiration; in fact, it may be classed with the best of the society's shows. A month back many growers were fearful the season would prove too forward, but fortunately during the last fortnight the weather was propitious, and they were enabled to keep them back; and thus the flowers were benefited by a gradual and consequently more luxuriant and regular expansion; they were far too numerous to allow anything like a notice of them all. Among them we observed in better order than even usual, Willnall's Ne plus ultra, Taylor's Ploughboy, Stretch's Alexander, and in nearly all the stands Oliver's Lovely Anne and Page's Champion. We give Messrs. Dickson's stand in full, as it contains none but good flowers: Gordon's Champion, Duchess of Oldenburg, Dickson's Duke of Wellington, Wood's Lord Lascelles, Taylor's Glory, Waterhouse's Conqueror of Europe, Oliver's Lovely Anne, Page's Champion, Dickson's Earl Stanhope, Hugh's Pillar of Beauty, Lancashire Hero, and Franklin's Bellona. The best pair were Page's Champion, and Duchess of Oldenburg. Mr. Chapman's best seedling was a very good flower, green edged, fine paste, and good eye. We cannot say much for the Polyanthus. The Pansies were both numerous and good. Mr. Thompson's stand may be taken as containing the best flowers:

they were Nymph, Curion, Grand Duke, Renown, Prince Albert seedling, Warrior, Eclipse seedling, Captain Boldero seedling, Sophia, Countess of Orkney, Desirable, Azenea, Duchess of Richmond seedling, Duke of Richmond, Chevalier, Corona, Delicata, Beauty of Bucks, Miss Stainforth, and Erecta. The second and thirteenth are Brown's; the rest are, we believe, Thompson's. Messrs. Brown exhibited a stand of eighteen of their Countess of Orkney, it appears a very desirable flower. Among the best of the Polyanthus we noticed Collier's Princess Royal, Hufton's Earl Grey, Clegg's Lord Crew and Lord John Russell, these were in Mr. Wilmer's stand.

## *List of Prizes.*

For the best collection of Miscellaneous Plants, the Royal Adelaide Cup, Mr. Atlee.

AMATEURS.

| | | |
|---|---|---|
| Best pair of Auriculas, | Large Silver Medal, | Mr. Neville. |
| Second ditto | Middle ditto | ... Lidgard. |
| Third ditto | Small ditto | ... J. Chapman. |
| Best Six Auriculas, | Middle ditto | ... Lidgard. |
| Best Twelve Heartsease, | Small ditto | ... Fyffe. |

GENTLEMEN'S GARDENERS.

| | | |
|---|---|---|
| Best Collection of Plants, | Large Silver Medal, | Mr. Coutts. |
| Second ditto, both 24 pots, | Middle ditto | ... Bruce. |
| Best Twenty-four Heartsease | Small ditto | ... Hancock. |

NURSERYMEN, FLORISTS, AND MARKET GARDENERS.

| | | |
|---|---|---|
| Best pair of Auriculas, | Large Silver Medal, | Messrs. Dickson. |
| Second ditto | Middle ditto | Mr. Gaines. |
| Best Collection of Plants, 24 pots, | Large ditto | ... Jackson. |
| Second ditto | Middle ditto | ... Pawley. |
| Best Twenty-four Heartsease | Small ditto | ... Thompson. |

TO ALL CLASSES.

| | | |
|---|---|---|
| Best Seedling Auricula, | Small Silver Medal, | Mr. J. Chapman. |
| Ditto Polyanthus, | Second ditto | ... Wilmer. |
| Ditto, Specimen ditto, | Third ditto | ... Lidgard. |
| Ditto Twelve ditto | Fourth ditto | ... Wilmer. |
| Best Specimen Plant, | Middle ditto | ... Jackson. |
| Second ditto | Small ditto | ... Dickson. |

EXTRA PRIZES OFFERED BY MEMBERS.

By Messrs. Dickson, *to Amateurs.*

| | | |
|---|---|---|
| Best Four Auriculas, one in each Class, | Silver Cup, | Mr. J. Chapman. |

By J. Burrup, Esq. *open to all Classes.*

| | | |
|---|---|---|
| Best Twelve Auriculas, | Large Silver Medal, | Messrs. Dickson. |

By J. Chapman, Esq.

| | | |
|---|---|---|
| Best Collection of Seedling Auriculas, raised and grown by the Exhibitor | Victoria Medal, (Coronation) | Messrs. Dickson. |
| Best pair of Auriculas, green and grey edged | Ditto | Mr. Lidgard. |

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## CALENDAR FOR MAY.

Stove. Advantage should be taken of every opportunity during the present month to propagate all the most desirable plants in this department, it being perhaps the most favorable months in the year for the purpose. Seedlings raised during the past two months will require potting off if not done before; they should be placed in the smallest sized pots that can be conveniently used. Specimen plants require much attention this month; free growing sorts, from the succulent nature of their young shoots, are very liable to the attacks of insects; these should be indefatigably watched for, and destroyed on their first appearance: to effect this, and also in a great measure prevent their approach, the plants should be occasionally syringed with a weak solution of tobacco water. The principal ornaments of the stove now are Amaryllis, some Crinums, Brunsvigia's, &c.: these should have a liberal supply of water, and their flower stems supported with wires or neat sticks; an increased supply of air may be given every fine day, though the house should be closed early in the afternoon; this will preclude the necessity of much fire heat, except the nights happen to be very cold. Some of the hardier plants will be benefited by being placed in the greenhouse. We recommend attention to what we urged last month on the necessity of keeping up a moist atmosphere.

GREENHOUSE. The plants here will now be growing rapidly, and to encourage them to a healthy growth, as much room should be allowed them as possible by removing all half-hardy plants and others that can be spared to a sheltered situation out of doors. Calceolarias may be repotted yet if any require it; they should have a plentiful supply of water as also all other herbaceous and succulent plants, in short, the plants generally should be looked over every morning with the water-pot. Ericas, Epacris, and such plants suffer greatly if allowed to become dry; the pots should be removed from the action of the sun's rays, or their roots are frequently killed by the pots becoming heated. Oranges, Citrons, Shaddocks, &c. should have a top dressing of cow or sheep's dung, or be frequently watered with liquid manure. Azalias, Camellias, Rhododendrons, &c. should have rather shaded situations allotted them with a good supply of water, and let the foliage be frequently washed with clear water. Geraniums for late flowering should be frequently stopped; those coming into flower should have a light airy situation; examine them often that they are not infested with green fly; fumigate them whenever it appears necessary; displace all weak shoots and tie the others out to regular distances, that the air may have free access to the middle of the plants. Train and tie Climbers. Ericas may be propagated, as recommended last month; give air abundantly every day, unless very rough, and towards the end of the month air may be left all night, whenever there is an appearance of fine weather; the plants may be syringed two or three times a week, but let it be done early in the day. Preparations should be made for turning the plants out towards the end of the month, though we prefer leaving the plants in their present places until the weather is fairly settled.

FLOWER GARDEN. We have several times mentioned the importance of a judicious arrangement of the plants intended for summer flowering in the flower garden; and as the season is now at hand for such distribution, we sincerely hope it will not be lost sight of: let nothing like individuality appear in the work, everything should tend towards producing one great whole; always keeping in mind the proper contrast of colour, the uni-

formity of appearance, and the natural or geographical grouping of the plants; these should all be attended to and made to bear one on the other, as far as may be found practicable.

Young plants of Dahlias should be placed in the open air to prepare them for planting out, which may be done by the middle or end of the month. Cuttings may still be taken of scarce sorts, where the conveniences for forcing have not been at hand, and the roots kept dry for planting, it may now be done. Auriculas should be frequently watered in small quantities; a mild shower of rain is beneficial to plants not in flower; the blooms must be protected from the sun and rain, as we advised last month; as soon as the plants have done blooming, remove them to a cool shaded place. Carefully attend to the blooms of Picottees, Carnations, Pinks, &c.; as they advance, they should be secured to the stakes; traps should be set for earwigs; if green fly appear on them, a little snuff blown sharply on them will generally kill them with one or two applications. By the middle of the month the awning may be placed over the Tulips, though it should not be used but in severe weather, until the blooms begin to expand; transplant all sorts of annuals, and sow again if required; water those removed if the weather proves dry. Cuttings may be taken of double wall-flowers, Lychnis, Canterbury Bells, and other perennials; these strike readily under a common hand-glass; half-hardy plants may be turned into their respective places. Balsams and other tender annuals should be frequently repotted; keep up a brisk heat for them; give them air and water as they require it. Pansies may still be struck. Ranunculus should have a regular supply of water in dry weather. Pot off cuttings of Chrysanthemus as soon as struck, as all other cuttings. Keep the walk free from weeds; grass will now require mowing; rake the beds and borders, and make everything neat as far as possible.





1. CATLEUGH'S. COMPTE DE PARIS — 2. GAINES'S. WARRIOR.

London, Bell & Parsons, June 1, 1842.

THE

# FLORIST'S JOURNAL.

JUNE 1, 1842.

## ON PELARGONIUMS.

WITH AN ENGRAVING OF COMTE DE PARIS AND WARRIOR.

HAVING spoken of the physiological character and local habit of the Pelargonium, or Geranium, as they are familiarly called, at p. 121 of the First Volume of the Florist's Journal, in returning to the subject, we must confine ourselves to a few practical remarks on the culture and general treatment of this highly popular flower. It is with much pleasure we remark that geraniums still maintain their high situation in general estimation: this is doubtless owing to the great attention bestowed on them by a few spirited individuals, who have, as it were, taken this extensive and interesting family under their especial care—well and richly do they merit the approbation of every lover of flowers. It may appear a startling assertion to affirm that the general taste should be directed to these flowers in so decided a manner by only a few; but who on reflection can deny the fact? To us it is a matter of much regret that the most interesting of the many agreeable associations connected with a garden is not more generally entered upon. We mean the originating new varieties of flowers from seed: that this so purely intellectual pleasure should be neglected is a matter of astonish-

ment; but as we intend offering a few observations on the *rationale* of the process, we now return to the cultivation of the plants under consideration. Every one grows geraniums, consequently there are several methods of growing them; but each method points to the same end, and each and every one of them which attains the object in view is correct: there may be some minor objections advanced against our mode, but we are persuaded, from the result of several years' practice, those who are inclined to follow the rules laid down will seldom fail of obtaining healthy plants, a vigorous growth, and an abundant bloom.

The first point to be observed is to insure strongly rooted plants at the earliest possible period previous to their being placed in the house for the winter; for this, the cuttings should be taken off at the commencement of July: it is not judicious to take them off while the plants are flowering, as it destroys the beauty of the plant; but it should be done immediately after, which is usually about the time mentioned. When taken off, the lower leaves should be cut away about three joints up, and the cuttings placed in a previously prepared bed of about equal parts decayed leaf mould and peat, and a third of the whole fine white sand; these should be well incorporated, and covered with a frame or handlights, observing to choose a shaded part of the garden as the most proper situation. In planting the cuttings they should be securely fastened in the earth with the dibble, and afterwards lightly watered, in order to settle the earth firmly about their stems; the glasses should be kept close and well shaded until they are rooted, when air should be admitted gradually, till they are fit for potting. The compost used for the first potting should be similar to that recommended for striking them in, and the pots suited to the size of the plants: it is now most essential to their future well being that an effective drainage is secured, for without it the plants frequently damp off during the confinement of the winter months. When potted they require protection from the sun for a few days, till they are reestablished; they may be allowed to remain in the open air till the end of September. In arranging the plants in the greenhouse, carefully avoid crowding them, as a free circulation is most necessary; it is far better to grow a smaller number of plants well, than in the endeavour to include too large a proportion to spoil the whole; for though there may be accommo-

dation in the way of shelves, &c., yet a confined atmosphere is equally injurious to vegetable as to animal life. All the air possible should be given during the day, so long as the weather continues favorable; during the winter the atmosphere of the house should be kept at a medium temperature of about 40°, till the return of increasing days, when an increased temperature of about 50° may be judiciously applied; in the short days and damp weather of the winter months much care is necessary to properly regulate the supply of water; this should be given in small quantities, and only when actually required: avoid wetting the foliage. Sometimes under the most healthy treatment the plants will be subject to attacks from the green fly (*Aphis Lanigera*), this should be constantly watched for, and on the first appearance fumigation should be had recourse to.

Early in February, the spring treatment should begin; the plants should be repotted. A much stronger soil is now required; one composed of loam, leaf-mould, peat, and fine white sand is generally found to succeed, in which the loam should bear a proportion of about one half the whole mass, leaf-mould and peat about equal quantities of each, and sufficient sand to keep the whole porous. Some cultivators omit the peat, and so use a larger proportion of vegetable mould. Frequent attention should be directed to stopping the points of the growing shoots, and so making the plants dwarf and bushy, and consequently increasing the quantity of flowers. A steady constant heat of 50° should be kept up: pinching the points of the shoots off should be persisted in till the middle of April, and as the plants advance in growth, they should be frequently turned round to the light, that all sides may grow alike; this they require at least once a week during the whole of the spring growth, until the flowers are just expanding; they should then remain in one position till they are all full blown, so that the blossoms may all incline to the front view.

The common and necessary precaution of fastening the growing shoots to sticks must be observed as soon as necessary, each shoot being allowed a separate stick, which should be small and neat, and placed as much out of sight as possible; free ventilation should be strictly attended to; and that the new growth may be encouraged the supply of water should bear a corresponding proportion to the increase of light and heat. Some cultivators

indulge their plants with an application of liquid manure once a week while they are growing; this may be beneficial, but requires great practical tact in the applying, and in the hands of an inexperienced grower, would probably prove rather an overpowering enemy than a useful ally. The syringe may be frequently and beneficially used from the time of their first seasonal action till the blooms are expanding. The plants should remain in the house till the blooming is over, immediately after which they may be taken into the open air, pruned and repotted. In pruning, the new wood should be cut back to within two or three eyes or joints of its base, the parts taken off serving as cuttings to form plants for the next season. This is the treatment usually applied, with some little variations to those plants intended as specimens; but there are many other ways in which the Geranium is equally beautiful and of as much importance. For planting in masses, in beds, or mixed with other exotics; for vases or rustic baskets, as window plants, or for forcing they are equally useful and equally admired: for all the latter purposes their treatment is the simplest possible, consisting only in the observation of the principal points of the foregoing rules, suited of course to the varied circumstances under which they are placed. We cannot avoid saying a few words on the saving and raising of geraniums from seed, though our space is rather limited; yet if we do not avail ourselves of the present opportunity, before we can again return to the subject the season for it will be past.

In selecting plants from which to obtain seed, only those possessing the most desirable qualities should be chosen, such as have fine shaped flowers, a large bold truss, or are remarkable for the brilliancy or singularity of their colours. The plants so chosen should have a full exposure to the sun in the most airy part of the greenhouse. They will require to remain in such situation till the seed is perfectly ripe, which may be known by the white downy awns of the seed bursting through the capsule; the seed may then be sown at once, if there is proper accommodation for the plants through the winter, if not it will be better to defer the sowing till the following spring; the seed may be sown in pots of light rich earth, such as recommended for the cuttings, and plunged in a gentle hotbed, till all are up. The treatment of the young plants is the same, whether they are ob-

tained from seed or cuttings. With respect to originating new varieties, the result is not absolutely certain; but they so strongly and naturally incline towards it, that the operation of crossing is scarcely required; but if any particular quality is desired, it had better be done. In such cases, very good approximations are usually obtained.

The most desirable properties of a geranium are, first, a well-shaped flower, in which the lower petals bear a due proportion to the upper, so that the entire flower may form nearly a circular figure. The colours should be well defined and brilliant; the truss large and rising above the foliage, which should present a vigorous and healthy appearance; the plant of robust habit, and free in the production of flowers. For all these united in the same plant, we may safely point to our present illustrations, either of which will be found desirable acquisitions to the most confined or limited collection. Ed.

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## ON CAPE BULBS.

TO THE EDITOR OF THE FLORIST'S JOURNAL.

Sir—Allow me to offer a few remarks in your valuable Journal on that very beautiful family of plants the Cape bulbs; they are especial favorites of mine, and as I should imagine of every one at all acquainted with their peculiar beauties.

In the term Cape bulbs, I do not include those from the interior and more southern parts of Africa, but those from the immediate neighbourhood of the Cape of Good Hope, or such as are found to succeed with us in the open air. I select these as, from their hardihood, the pleasure attending the growing them may be enjoyed by a much greater proportion of the lovers of Flora than those of the same family which require the aid of a stove or greenhouse to perfect them. At least one general remark applies to the cultivation of all those I shall mention—which is the strongly marked seasonal character of the growth; this must be strictly attended to: the soil too may be said, with only one or two exceptions, to be an uniform one for the whole

of them. In short I have selected only those which from their uniformity in habits may generally be grown in the same bed, or at least subject to the same treatment, and consequently so much the less trouble will attend the culture of them.

With these preliminary observations I enter on their general cultivation—one of the most essential parts of which is the proper adaptation of the soil. That which I have found most suited to them is a mixture of light rich vegetable mould and good peat earth, in about equal quantities, adding about a fourth of the whole of turfy loam and fine white sand; this last article should be in proportion as the soil may be porous or otherwise: sufficient should be used to keep the whole mass pervious to the heat of the sun in the early part of the season, and to allow the superfluous rains to drain off.

The proportions of the other constituents may be varied a little according to the respective qualities, but what I have mentioned may be called the mean of each. I am aware that these kind of recipes are, by those who profess to be learned on the subject, sometimes termed empirical; but I would ask, how are we to convey a practical idea of the various soils necessary to form a required whole but by this method?—always leaving the cultivator to form his own judgment as to the precise quantity or quality of each. Cape bulbs may be grown either in beds as permanent objects, or in pots for occasional ornamenting. For the first the bed should be prepared early in March, by removing the earth to the depth of about fifteen or eighteen inches, to allow for an effective drainage to be formed by strewing the bottom over with rough stones to the depth of about three inches, over which should be laid a stratum of fresh turf to prevent the soil falling between the stones; this drainage is not always necessary when the soil is naturally light and porous, but in heavy soils it is indispensable; the situation too should be made conducive to this end, if possible; a gentle rise and fully exposed to the sun is the best I have found. When the bed is formed, the soil (as before recommended) should be laid in to the depth of eight or ten inches, or till within two inches of the intended surface, mixing and breaking it fine with the spade. When filled to the required height it should be raked level, and the roots planted, allowing the smaller kinds about four inches' space between each root, and the larger ones about six; the remaining

soil should then be laid gently and evenly on, taking care not to disturb the roots, and the whole should be finished by raking the bed smoothly over. They require to be kept constantly free from weeds, and a liberal supply of water just previous to blooming. If the weather happens to be very dry, a slight covering of half-decayed leaves or other mulch will be found serviceable, though it must be observed the roots require the full force of the autumn sun to ripen them thoroughly. In this bed they may remain three years, or even longer if not too thick, covering them about a foot thick with leaves on the approach of winter. Some cultivators take their roots up every autumn, but this is not necessary, unless to separate or remove them; when this is done a fine clear day should be chosen soon after the foliage becomes dry; they should be thoroughly cleaned from the mould, and exposed to the sun for about two or three hours to dry, after which I spread them on dry airy shelves in the shade till well dried, they may then be kept in boxes or drawers till wanted for planting. When grown in pots they make very beautiful subjects for the drawing-room or halls, though they are more difficult to bloom than when in beds.

The pots should be suited to the size of the plant; for the large kinds small 32s will be found large enough; and for the smaller sorts, as Ixias, &c. large 48s will do. The soil should be similar to that recommended for beds, with a similar drainage: the roots should be potted early in March; three roots of the smaller sorts, as sparaxis, triconema, &c., may be placed in each pot, but the strong growing species will each require a separate pot. In potting, the crown of the bulb should be kept a little above or at least on a level with the surface of the soil. After potting they may be plunged in old tan or leaves in the open air, covering them about three or four inches; or if wanted for forcing they should be placed in a cold frame as soon as potted, covering the glass with mats to protect them from frost. They may be continued here till about half grown, and then placed in the greenhouse; by this treatment they bloom a fortnight earlier than those in beds. These roots are very impatient of heat, therefore it should never be attempted to force them very early. It is best to change the roots intended for pot culture every season, planting out those which have been grown in pots, and selecting the

strongest from those grown in beds for the ensuing season for pots.

I will now enumerate a few of the best, though it is difficult to say which is prettiest where each and all are most beautiful.

The first and most generally grown is the Ixia; of this lovely genus many very fine varieties have been raised by means of cross impregnation. Of the species perhaps the finest are

| | | | |
|---|---|---|---|
| I. Aulica. | I. Leucantha. | I. Conica. | I. Viridiflora. |
| Columellaris. | Maculata. | Capitata. | Crateroides. |
| Flexuosa. | Amœna. | Crocata. | Lilacina. |

Of the varieties the best are

| | | | |
|---|---|---|---|
| I. Alba. | I. Aulica rubra. | I. Longiflora rosea. | I. Liliago. |
| Viridiscens. | Ochroleuca. | Pallida. | Cupacea. |
| Longiflora. | Variegata. | Thyrsiflora. | Curta. |

Next to these are the Sparaxis, quite equal in beauty, and only separated from Ixia on account of some small botanical difference; and it is extremely difficult to distinguish the varieties from the actual species, I will include them in one remark. Probably the best are

| | | | |
|---|---|---|---|
| S. Grandiflora. | S. Tricolor. | S. Tricolor nova. | S. T. Rosea alba. |
| Triolor, violacea. | Sanguinea purpura. | Tricolor capitata. | Fucata. |
| Sulphurea. | Rosea. | Flexuosa nova. | Coccinea. |
| Bulbocodium. | Versicolor. | Vers. splendens. | Bicolor. |

There are several other varieties, but these, I believe, include those most worthy of notice. Next to these we may place Trichonema, the prettiest species of which are, in my opinion,

T. Bulbocodium. T. Pudicum. T. Speciosum. T. Caulescens.

This genus is numerically deficient, but very pretty; next to it we may place Geissorhiza, among which I may mention

G. Rochensis. G. Obtusata. G. Excisa. G. Setacea.

The next genus I will mention is Tritonia, of which a few varieties have been obtained, and very beautiful they are.

| | | | |
|---|---|---|---|
| T. Rosea. | T. Flava. | T. Crocata. | T. Longiflora. |
| Capensis. | Tenuiflora. | Tenuiflora concolor. | Pallida. |
| Squalida. | Miniata. | Viridis. | Fenestrata. |

There are others, but these comprise the most perfect flowers. All of those already mentioned, together with the little interesting

Anomatheca cruenta, and also Witsenia corymbosa, and Antholyza coccinea, are suitable for pot culture. The last-mentioned three will bear a much greater heat than any of the others. Witsenia is generally recognized as a greenhouse plant, but it will also succeed in the open air, if treated as recommended at the beginning of this article. The other kinds I would mention as suitable for beds are, first, Watsonia, of which there are several species; among them are

| | | | |
|---|---|---|---|
| W. Marginata. | W. Marginata minor. | W. Punctata. | W. Rosea. |
| Rosea alba. | Variegata. | Brevifolia. | Humilis. |

Then there is that curious genus Wachendorfia, the roots of W. brevifolia resembling a ball of transparent wax.

| | | | |
|---|---|---|---|
| W. Thyrsiflora. | W. Graminea. | W. Brevifolia. | W. Hirsuta. |

The genus Babiana has several very beautiful species, among which may be recorded

| | | | |
|---|---|---|---|
| B. Tubiflora. | B. Tubata. | B. Sambucina. | B. Stricta. |
| Thunbergii. | Plicata. | Sulphurea. | Villosa. |

I cannot conclude without mentioning the pretty little Hesperantha, or evening flower, as it may be rendered; they are very pretty; the species are

| | | | |
|---|---|---|---|
| H. Pilosa. | H. Graminifolia. | H. Falcata. | H. radiata. |

There are several others in this interesting family well worthy of notice; but as I have extended this to such a length I must defer the mention of them till another opportunity, should you think them worth inserting. I must, however, remark, that of all the kinds of flowers made use of to ornament our gardens, these have a peculiar beauty; the colours are so varied and of such intensity in some; and besides a succession of flowers may be had in a well arranged bed from April till July,—that I would recommend them to every one possessing that most interesting of all things, *a garden*.

P.

## VISITS TO NURSERIES.

### MR. GROOM'S, CLAPHAM RISE.

SINCE our last visit, Mr. Groom has removed from Walworth, and is now located as above. We were surprised at the astonishing progress he has made in reestablishing his nursery: in the short space of a few months, the whole has been completely removed, arranged, and, in some instances, remodelled, and presents now a finished appearance. In the erection of the houses, we noticed Mr. Groom has made use of slate slabs for the paths, an article we would strongly recommend to be used either for walks or for level stages in all horticultural erections, as being less expensive than stone, though equally durable, and being every way preferable to wood, wherever it can be substituted for it. The principal object of our visit was the tulips. The day (10th) proved very favorable, though the previous weather had been much against the opening of the flowers; yet we do not recollect to have seen so large a collection with so few objectionable blooms. One thing we remarked in the awning over the principal bed, which we think worth universal adoption, in place of the canvass falling to the bottom of the frame, as is the usual practice, one side only was covered with it, the other was fitted with panels of netting strained tight, thus affording the plants a much greater proportion of light and air than can be admitted with the common covering, and so preventing the attenuated appearance sometimes seen.

The queen of the collection was, as is most fitting, Victoria Regina. This beautiful flower, whose portrait we are proud to think graces our pages, was in most perfect order; a finer shape does not exist, and we are convinced it will be grown when Louis XVI. is forgotten. A fine bloom of Nourri Effendi attracted much attention; in the bed were several Claudianas in very fine stain. Among the Bizards deserving particular mention, were Prince Albert, Pompe Funèbre, Polyphemus, some very fine Catafalques, Charbonnier Noir, Duke of Devonshire; among the Byblœmens, we may mention Rosa Blanca,

Louis XVI., Queen Adelaide; some true Lacs, Rose Camuze, Rose Cerise Blanche, Rose Mignonne, Venus, Comte de Vergennes, Titiana, and Violet Alexandre, and Bienfait Incomparable, and many others; in short, to mention the tithe of them would occupy the half of our work, so that we are reluctantly compelled to pass over them. Mr. Groom also grows a rather extensive collection of auriculas, and also geraniums; the first were of course over, and the geraniums not yet out, so that we cannot speak of them further than that the plants looked in excellent condition. The ranunculas were remarkably healthy and promise an abundant bloom. In one of the greenhouses were some small plants of Chorizema Dicksonii, flowering profusely, thus proving it to be as it was at first represented, an abundant and free flowering variety.

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## LIST OF NEW PLANTS.

We have been induced, from the representations of our friends and correspondents, to add to our work a notice of new plants and flowers; and being desirous of meeting the extensive patronage the Florist's Journal is favoured with by increased efforts of our own, we cheerfully comply; in short, our only wish is to make the work exactly what our subscribers wish it—and to do this we spare neither pains nor expense, being fully determined to deserve the fast increasing approbation we are honoured with.

### Diadelphia Decandria—Leguminosæ.

*Genista Atleeana.* An accidental variety obtained from seed by Mr. Atlée, gardener of H. Beaufoy, Esq., of Lambeth: the plant is of very neat habit, as compact as G. rodophne without its lumpish appearance, the foliage rather small and close, the stem rising in the centre and branching out in a pyramid form; the flowers are bright orange colour, several shades deeper than any other species, much larger, and produced very thickly on large racemes: altogether a very striking variety, being a most decided improvement on the old kinds. We saw it in the nursery of Messrs. Fairbairn, Clapham, and think it a very desirable plant.

Monadelphia, Polyandria—Camellicæ.

*Camellia Nitida.* A valuable addition to this interesting family. The general habit of the plant is dwarfish; foliage small, of a deep shining green; flowers small, but of exquisite shape, and great regularity; colour, shaded crimson, and beautifully clear white stripe, altogether possessing great symmetry. Imported from China by J. Reeves, Esq. We saw it growing in the collection of Messrs. Chandler, Vauxhall.

Didynamia Angiospermia—Gesneriaceæ.

*Gloxinia speciosa var. Macrophylla Variegata.* A beautiful variety of the old Gloxinia speciosa, imported by Messrs. Vietch, of Exeter, from the Mountains of Brazil, in 1840; it differs chiefly from the original speciosa in having the principal veins in the foliage beautifully mottled with pale whitish green. The flowers are rather larger and darker.—*Bot. Mag.*

Monœcia Polyandria—Aroideæ.

*Colocasia odorata.* This is one of that curious family Aroideæ, which have been found to evolve heat during certain stages of flowering—a difference of eleven degrees has been observed between the temperature of the flower and that of the atmosphere of the stove in which it was growing. This plant, Colocasia odorata, is a native of Pegu, requiring the usual treatment applied to stove plants; it possesses a powerful fragrance, and noble foliage, but is rather deficient in floral gaiety; it has many claims on the notice of the Botanist, but is not well suited to the general cultivator.—*Bot. Mag.*

Decandria Monogynia—Ericaceæ.

*Clethra Quercifolia.* A desirable addition to the old and favourite genus Clethra: it has highly fragrant flowers, which are white; a greenhouse shrub, imported in 1839.—*Bot. Reg.*

Decandria Pentagynia—Oxalideæ.

*Oxalis Martiana.* In compliment to Dr. Martius, a very pretty species, closely allied to Oxalis lasiopetala, a native of Brazil, introduced in 1828, its abundant crimson-red flowers make it a desirable plant for the greenhouse.—*Bot. Mag.*

Polygamia Monœcia—Leguminosæ.

*Acacia Platyptera.* We are indebted to Mrs. Wray, of Oakfield, Cheltenham, for this beautiful addition to the already extensive genus Acacia; raised from Swan River seeds in 1840, an abundant bloomer; flowers rich yellow, a valuable acquisition to the greenhouse.—*Bot. Mag.*

Pentandria Monogynia—Convolvulaceæ.

*Mina Lobata.* An annual stove twiner, flowers rather small, at first crimson, then orange, and dying off a pale yellow, introduced 1841. Mina, in compliment to Don Francisco Xavier Mina, a Mexican minister.—*Bot. Reg.*

Gynandria Monandria—Orchideæ.

*Catasetum Wailesii.* An orchidaceous plant, of but little beauty; received from Honduras, by G. Wailes, Esq., of Newcastle, in 1840; flowers green.—*Bot. Mag.*

Didynamia Angiosperma—Gesneraceæ.

*Achimenes longiflora.* This will be found a desirable plant, in every collection, however limited; in habit it agrees with its congener, the Triverania; the flowers are violet-coloured; it was received by the Horticultural Society, from Guatemala, in 1841, from their collector, Mr. Hartweg.—*Bot. Reg.*

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## FLORICULTURAL INTELLIGENCE.

### HORTICULTURAL SOCIETY.

The first show for the season took place at the Society's gardens, Chiswick, on Saturday, the 14th.

The day was very fine, and the assemblage of visitors exceedingly numerous. Her Majesty and Prince Albert were present. The show of plants, either for beauty or number of specimens was quite equal to any previous spring show that we have ever witnessed.

The Azaleas formed the most prominent objects; they were

particularly fine and very numerous. Among them the collection of our friend, Mr. Green, deserved particular remark, containing beautifully grown plants of all the leading varieties. Most conspicuous was A. variabilis very finely bloomed; some Indicas; and his single specimen, A. Gladstoniana. Collections of Azaleas were shown also by Mr. Jackson of Kingston, Mr. Barnes of Bromley, Mr. Smith Norbiton, and Mr. Falconer.

The best miscellaneous collection of plants was shown by Mr. Goode, gardener to Mrs. Lawrence of Ealing Park, containing some fine plants of Boronia, Euphorbia, Ixora, Hovea, Azaleas, Rhododendrons, Cytisus, Acacia, Elichrysum, Cacti, Gloxinia, &c.

Mr. Hunt, gardener to Miss Traill of Bromley, had also a very good collection, in which we may mention as particularly fine plants of Ixora coccinea, Erica aristata major, Euphorbia splendens, Azalea variabilis, Pimelea decussata. Another large collection was shown by Mr. Redding, gardener to Mrs. Marryatt, containing Rosa Devoniensis, Azaleas, Smithii coccinea, A. speciosa rosea, A. indica alba, A. rosea, and A. variabilis; Hovea celsi, Casaurina campanulata, Maxillaria Harrisonia, Tropæolum tricolor, and a promising seedling Cineraria. Small collections were also shown by Mr. Green, Mr. Goode, Mr. Pawley, and Mr. Jackson, in whose collection we noticed Kennedia longiracemosa, K. glabrata, Hardenbergia macrophylla, Boronia serrulata, Tropæolum, a fine plant of Ancidium Phelpsianum, and Azaleas, &c.

The specimen plants were very numerous and beautiful, particularly Mr. Falconer's Lechenaultias biloba and formosa, Mr. Green's Azalea Gladstoniana, and Erica Hartnelli, Mr. Chalmer's Platilobium parviflora, Euthales macrophylla by Mr. Standish, and Zichya coccinea by Mr. Allnutt. Orchideous plants were shown in collections of six species, Mr. Paxton, Mr. Hunt, and Mr. Barnes. Among them were some finely-grown plants, but nothing to notice as new or particularly scarce.

The geraniums were very fine and so numerous that we cannot attempt to name them all; they were shown by Mr. Gaines, whose collection of twelve contained Diademetum rubescens, Emperor, Raffael, Grand Turk, Elisa superb, Matilda, Juba, Climax, Grace Darling, Alicia, Mabel, and a seedling. Mr. Bromley's twelve were Discount, Climax, Diademetum ru-

bescens, Miss Anderson, Lady Denbigh, Louis Quatorze, Lady Murray, Dennis's Perfection, Victory, Vandyke, Jewess, and Garth's Perfection. They were shown also by Mr. Beck, Mr. Catleugh, Mr. Howe, and Mr. Cock (not for competition). Seedlings were shown by Mr. Beck and Mr. Rendle of Plymouth.

A fine stand of Tulips were shown by Mr. Wilmer of Sunbury, who had also a beautiful seedling Rose tulip, called Prince of Wales. Pansies were shown in great variety; three fine seedlings, called Duchess, Commissioner, and Xanthus, were exhibited by Mr. Henbrey of Croydon. Messrs. Brown had their Countess of Orkney, Crœsus, Curion, and Miss Nugent.

A beautiful collection of roses, from Messrs. Lane of Berkhampstead, attracted much attention. Among them were the following varieties:

*Bourbon.* Bouquet de Flore, Breon, De Nuilly, Roblin, Ceres, Emilie Courtier, Clementine Duval, Boulogne, Armosa, Coquette de Montmorency, General Merlin, Thimoclé, Augustine Marget, Grand Capitaine, Cardinal Fische, Theresita, Queen of Bourbons, Triomphe de Montmorency.

*Perpetual.* Tonida and Angelina.

*Hybrid Perpetual.* Miss Elliot, Duchess de Nemours, Aubernon, Duc d'Aumale, Madame Laffay, Edward Jesse, Fulgorie Sisley, Count de Paris, Queen Victoria, Prince Albert, Gloire de Rosermene, Gloire de Guerin, William Jesse.

*China.* Nouvelle Héloise, Gabrielle, Rubens, Victoire d'Aumay, Eugenie Hardie, Eugene Beauharnais, Abbé Moiland, Cramoisie eblouissante, Cramoisie superieure, Nemisis, Belle de Florence, Louis Phillipe, Triomphant, Miellez, Carmin Desprez, Madame Fries, Morel, Caroline de Berri, Sulphurea superba, Lamestine, Assereus, La Camöens.

*Hybrid China.* Lady Montmorency, Charles Louis, Coup d'Hebe, Belle de St. Cyr, Earl Talbot, Belle Heloise, Emperor Probus.

*Tea-scented.* Bougere, Belle Allemande, Abricote, Compte d'Osmont, Charles Reyband, Hardy, Taglioni, Eliza Sauvage, Devoniensis, Princess de Mecklenburg, Multiflora, Goubault, Triomphe de Flore, La Renommé, Compte de Paris, Princesse Helene, Besnor, Eugene Jovin, Marshall Vallée, Nestor, Mac Carthy, Solomon, Strombio, and Leveson Gower.

Some splendid Heaths were shown in collections by Mr.

Jackson, Mr. Mays, Mr. Barnes, Mr. Green, and Mr. Story. Mr. Jackson's were Physioides, Viscovier, Sulphurea, Linnæoides superba, Hartnelli, Echiflora, Odora rosea, Mundula, Tubiflora, Grandinosa, Princeps, Epistonium, Vestita coccinea, Perspicua nana, Tortulaflora, Depressa, and Elegans.

Calceolarias were exhibited by Mr. Catleugh, Mr. M'Conach, and Mr. Gaines, who had Sanguinea, Bride, Rienzi, Aspagaria, Golden Sovereign, and Fairy Queen. A fine collection of tall cacti, shown by Mr. Barnes, were much admired.

*The following is a List of the Prizes:*

Roses. Large Silver Medal, Messrs. Lane and Son.

LARGE COLLECTIONS.

Pelargoniums. Large Silver Medal, Mr. Beck. Silver Knightian, Mr. Bromley: do. Mr. Howe.

NURSERYMEN.

Gold Banksian, Mr. Catleugh. Large Silver, Mr. Gaines.

SMALL COLLECTIONS.

Silver Gilt Medal, Mr. Catleugh: do. Mr. Gaines.

LARGE COLLECTIONS (OF 50 to 60.)

Miscellaneous Plants. 1st Gold Knightian, Mr. Goode. 2d Gold Banksian, Mr. Hunt. 3d Large Silver, Mr. Redding.

SMALL COLLECTIONS (OF 15 to 20.)

1st Gold Banksian, Mr. Green. 2d Large Silver, Mr. Goode: do. Mr. Barnes: do. Mr. J. Smith.

NURSERYMEN.

1st Gold Banksian, Mr. Pawley. 2d Large Silver, Mr. Jackson: do. Mr. Catleugh.

COLLECTIONS OF SIX SPECIES.

1st Silver Banksian, Mr. Bruce, gardener to B. Miller, Esq. Tooting.

2d Silver Knightian, Mr. Kyle, gardener to R. Barclay, Esq.

NURSERYMEN.

Large Silver, Mr. Fraser, Lea Bridge Road.

Stove and Greenhouse Climbers, Gold Banksian, Mr. Goode. Large Silver, Mr. Clarke.

Azaleas. Gold Banksian, Mr. Green. Large Silver, Mr. Falconer. Silver Knightian, Mr. Barnes.

NURSERYMEN.

Gold Banksian, Mr. Smith Norbiton. Large Silver, Mr. Jackson.

SINGLE SPECIMENS.

Ornamental Plants. L. S. Mr. Jackson for Erica elegans. Do. Mr. May, for Erica-aristata major. Do. Mr. Paxton, for Rhododendron Gibsonii. Do.

Mr. Falconer, for Lechenaultia formosa. S. K. Mr. Green, for Erica Hartnelli. Do. Mr. Clarke, for Lechenaultia formosa. Do. Mr. Bruce, for Elicrhysum humile. Do. Mr. Green, for Tropæolum tricolorum. S. B. Mr. Fraser, for Epacris grandiflora. Do. Mr. Bruce, for Polygala oppositifolia. Do. Mr. Green, for Elicrhysum humile. Certificates to Mr. Croucher, for Azalea variabilis. Mr. Barnes, for Podolobium trilobatum. Mr. Barnes, for Columnea longiflora. Mr. Allnutt, for Zicchya coccinea. Mr. Green, for Tropæolum sp. Mr. Kyle, for Bossiæa sp. Mr. Redding, for Clematis azurea, and Mr. Green, for Azalea Gledstonii.

COLLECTIONS OF SIX SPECIES.

Orchidaceæ. Gold Banksian, Mr. Hunt. Large Silver, Mr. Barnes. Silver Knightian, Mr. Paxton.

SINGLE SPECIMENS.

L. S., G. Barker, Esq., for Phaleonopsis variabilis. S. K., Mrs. Wray, for Cattleya Skinnerii. Do. Mr. Paxton, for Dendrobium Devonianum. S. B., J. Jarrett, Esq., for Saccolobium guttatum.

Herbaceous calceolarias. Large Silver, Mr. M'Conach.

NURSERYMEN.

Large Silver, Mr. Catleugh.

Shrubby Ditto. Large Silver, Mr. M'Conach.

NURSERYMEN.

Large Silver, Mr. Catleugh. Silver Banksian, Mr. Gaines.

Silver Banksian Medals were also awarded to Mr. Green, for Calceolaria ne plus ultra. Mr. Standish, for C. Standishii. Mr. Gaines, for Pelargonium amulet. The Rev. R. Garth, for P. symmetry. Silver Knightian Medals to Mr. Donald, for Hardy Azeleas, and to Mr. Wilmer, for Tulips; and a Certificate for his Seedling Tulip, Prince of Wales.

The gardens were in excellent order, the plants and trees looking very healthy. That beautiful old plant the Wistaria (Glycine) Sinensis, continues to flourish, covering now upwards of 150 feet of wall with its large clusters of lilac flowers.

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## FLORICULTURAL SOCIETY OF LONDON.

THE first show of this Society for the season took place on Tuesday, April 26th, at the Crown and Anchor, Strand. But before going into the particulars of the show it may not be amiss just to glance at the objects and principles of the society itself. We have not had an opportunity of adverting to it before, and

therefore gladly embrace the present, as the advantages held out are of much importance, especially to amateur growers. The society is composed chiefly or almost entirely of first-rate practical florists; and according to the circular issued, "the objects of the society are principally confined to the consideration of new productions from all parts of the country, and to the encouragement and publicity of such as can bear the test of the strictest censorship, according to a fixed and uniform standard." Thus to the raiser of any new and valuable production, the means are offered of at the same time confirming his own previous opinion, and making it known to the world in its proper character. This society will also render essential service to the purchaser of new flowers, by preventing false descriptions, &c.; as, in our opinion, every new florist's flower should be suspected that is sent out before it has stood the test of one or two examinations. The want of a *fixed* and *uniform* standard has been long felt and deplored by all florists; and the advantages of a central board, as we may call it, will not, we think, be denied by any one; and so long as the proceedings of the society are conducted in an impartial and honorable manner (to the which we shall keep a watchful eye), its decisions will be found the fairest criterion by which we may judge of the merits of new flowers.

"All specimens submitted to the society for judgment must be sent free of expense; and will be positively rejected unless accompanied by the name and address of the parties, contained in a sealed letter, which will not be opened until the decision is given, when an answer will be returned by the secretary, stating the merits of the production sent."

The show on the 26th was not so fine as we anticipated, owing in a great measure to the unavoidable absense of two of the principal growers, Messrs. Gaines and Dickson. Several very promising seedling auriculas were exhibited; the following is a

### *List of the Prizes.*

AMATEURS.

Best pair of Auriculas, green and grey edges, for Page's Champion and Hedge's Britannia . . . Mr. Burrup, Brixton.

Second best pair of Ditto, for Page's Champion and Grime's Privateer. Mr. Lidgard, Hammersmith.

Best grey edge Ditto, single plant, for Oliver's Lovely Ann. Mr. Lidgard, Hammersmith.

The Prize for green edged specimen was not awarded in this class.

NURSERYMEN, FLORISTS, AND MARKET GARDENERS.

Best collection of Twelve Auriculas, for Fletcher's Ne plus ultra, Page's Champion, Taylor's Favorite, Grime's Privateer, Lee's Colonel Taylor, Oliver's Lovely Ann, Lee's Bright Venus, Clegg's Crucifix, Warris's Blucher, Metcalf's Lancashire Hero, Kenyon's Ringleader, Netherwood's Othello . . . . . Mr. Wilmer, Sunbury.

Best pair of green and grey edged, for Oliver's Lovely Ann, and Fletcher's Mary Ann . . . . . Mr. Wilmer.

Best green edge, for Clegg's Imperator . . Mr. Wilmer.

Best grey edge, for Fletcher's Ne plus ultra . . Mr. Wilmer.

Best Six Polyanthus, for Hefton's Earl Grey, Buck's George IV., Pearson's Alexander, Seedling, Nicholson's King, Seedling (no name). Mr. Wilmer.

OPEN TO ALL CLASSES.

Best Polyanthus, for Pearson's Alexander . . Mr. Lidgard.

Auriculas, Seedlings of 1842, for a green edge, named Duke of Wellington; for a grey edge, named Diamond; for a green edge, named Viola; for a green edge, named Preservation . Mr. H. Goldham, Islington.

Seedlings of 1841, for a green edge named Squire Chillman. . Mr. Wilmer.

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## ROYAL SOUTH LONDON FLORICULTURAL SOCIETY.

THE Second Exhibition of this Society was held on Wednesday, the 14th of May, at the Horns Tavern, Kennington. The show of plants and flowers was good. The Pelargoniums forming the chief attraction.

*The following Prizes were awarded*:

AMATEURS.

Best 12 Tulips, 4 of each kind, Roses, Bizards, and Byblæmens, 1st. Large Silver Medal, Mr. Venables. 2d. Middle Silver Medal, Mr. Reeves, Best 24 Pansies in varieties. 1st. Middle Silver Medal, Mr. Edmonds. 2d. Small Silver Medal, Mr. Bridges.

GENTLEMEN'S GARDENERS.

Best collection of miscellaneous plants, 24 pots, Large Silver Medal, Mr. Atlee. Best collection of 6 varieties of Ericas, Large Silver Medal, Mr. Curtis. Best 36 varieties of Pansies, Mr. Hancock.

NURSERYMEN, FLORISTS, &c.

Best collection of Pelargoniums, 12 varieties, 1st. Large Silver Medal, Mr. Catleugh, for Compte de Paris, Ovid, Magna Charta, Orange Boven, Discount, Sylph, Jewess, Life-Guardsman, Climax, Coronation, Erectum, and Victory. 2d. ditto, Middle Silver Medal. Mr. Gaines, for Louis Quatorze, Matilda, Lady Palmer, Raphael, Climax, Lady E. Bulteel, Emperor, Exquisite, Delicata, Sylph, Diademetum Rubescens, and Grand Duke, best collection of Ericas, 9 varieties, Middle Silver Medal, Mr. Jackson. Best 12 Tulips, 4 of each kind, Large Silver Medal, Mr. Wilmer. 2d. Middle Silver Medal, Mr. Lawrence. Best 50 varieties of Pansies, Middle Silver Medal, Mr. Thompson. 2d. Small Silver Medal, Mr. King.

OPEN TO ALL CLASSES.

Best specimen plants of 4 distinct genera, Large Silver Medal, M. Bruce, for Ixora Coccinea, Fuschia Corymbiflora, Coleonema Rubra, and Elichrysum humile, best single specimen of any genera. 1st. Middle Silver Medal, Mr. Atlee, for Boronia pinnata, 2d. Small Silver Medal, Mr. Bruce, for Azalea Gledstoniana, best seedling Pansy, 4 blooms, Small Silver Medal, Mr. King.

Mr. Gaines exhibited four seedling Pelargoniums, which were much admired; they were called, Lady Sale, Amulet, Emperor, Superb, and Prince of Wales. Mr. Curtis's Collection of Ericas contained Hybrida, Suaveolens, Odora rosea, Perspicua, Hartnelli, and Vestita Alba. Another collection shown by Mr. Strong contained five plants of Depressa, Campanulata, Thunbergia, Mundula, Vestita Alba, and Sulphurea; they were recommended for a prize.

## THE FLORIST'S LETTER-BOX.

TO THE EDITOR OF THE FLORIST'S JOURNAL.

HAVE any of your subscribers reported to you the comparative merits of charcoal mixed with the usual compost for growing succulents in? If so, please to inform me in your next Letter-box the results which attended their experiments.

Not having any fir charcoal, I used the ashes from oak coppice wood last autumn, and cannot report favorably upon the result, as evidenced by the plants this spring. The plants experimented upon were crassula coccinea, cactus truncatus, and

cactus speciosus; their growth has not been equal to those of the same species and size, potted at the same time in the usual compost, and their general appearance is much more dull.

R. W. B.

*May* 3, 1842.

We beg to call the particular attention of our correspondents to the above communication, as we shall be happy to receive the results of any experiments; we have at present several in progress, but not of sufficient maturity to enable us to form a correct decision. Our first opinion of the subject was favorable to it, and we are not yet sufficiently advanced to warrant or even allow a change. We have heard it recommended as a medium for conducting bottom heat to plants plunged in it.

"R. W. B." deserves our best thanks for bringing the subject forward, and any other hints he may favour us with shall be duly attended to, as it is this spirit of enquiry and enterprise we wish to encourage.

His final remark is properly valued and shall be observed.

### TO CORRESPONDENTS.

Will you or any of your correspondents favour me with a list of twenty-four thoroughly good Auriculas, that may be depended on as fit for showing. S. H.

"S. H."—Page's Champion, Oliver's Lovely Ann, Lee's Colonel Taylor, Taylor's Ploughboy, Taylor's Glory, Dickson's Earl Stanhope, Lancashire Hero, Duchess of Oldenburg, Hedge's Britannia, Grime's Privateer, Warris's Blucher, Fletcher's Ne plus ultra, Netherwood's Othello (self), Wood's Lord Lascelles, Hugh's Pillar of Beauty, Dickson's Duke of Wellington, Stretch's Alexander, Franklin's Bellona, Gordon's Champion, Smith's Waterloo, Waterhouse's Conqueror of Europe, Schole's Ned Lud (self), Widnall's Ne plus ultra, Lee's Bright Venus.

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## CALENDAR FOR JUNE.

Stove. Increased attention will be necessary this month to properly order the due supply of water, which is of the utmost consequence during the progress of the new wood; everything that can with propriety be removed should at once be taken into

the greenhouse, that the remaining and most valuable plants may have the benefit of a free circulation. Specimens and free growing plants may be repotted for the last time if required. Palmæ, Scitaminæ, and Orchideæ require a full and free supply of water; the first may be shifted and separated if necessary. Towards the end of the month, a slight awning of thin canvass placed on the outside of the roof will be found beneficial; it prevents the too-speedy evaporation of moisture: and the generality of flowers attain a much greater brilliancy than when exposed to the full force of the sun. Thin out and tie up climbers whenever necessary, as also all other fast growing plants. It is in this month the cultivator should lay the foundation of a sound, vigorous, and well-arranged growth, by due attention to thinning, pruning, and stopping all irregular or misplaced wood, and by a proper supply of the necessary stimuli. Cuttings and seed of rare or desirable plants may still be put in. Syringe those plants which are not in bloom, and saturate the paths of the house every day, as the liberal use of water in this way is the best preventive for red spider; shut the house up early in the afternoon, retaining a good strong sunheat.

Greenhouse. All the plants intended to stand in the open air during summer should now be taken out. It is a very common practice to place such plants at the back of a north wall, and that happens generally to be an out-of-the-way sort of place, where scarcely any one ever honours them with a visit, except to give them their daily allowance of water; to this we have a most horrid aversion. Why should they not be made to contribute to the embellishment of the pleasure-garden, the which they are so effectively qualified for. If the plants are in a healthy state, and are regularly supplied with water, there need be no fear of their receiving any injury either from the sun or any other cause, of course the usual and necessary caution of fastening the tallest to stakes must be taken, and plants that have fine fibrous roots such as Epacris, Erica, &c. should have the pots they are growing in placed in a larger one, and the space filled with moss; in short, if a sufficient quantity is at hand, it is a good plan to cover the surface of all the pots with it, as it keeps the roots cool and hides the pots; in arranging them, groups will be found most effective, though it must not be under the drip of trees, &c.

The vacant spaces in the house should be filled with Balsams, Cockscombs, and other tender annuals; these must be constantly kept moist, or the flowers fall. In hot weather they require water twice a day; liquid manure may be given them once or twice a week; a plentiful supply of air should be given every day and also some at night, which should be increased as the weather becomes warmer. Those plants which may remain in the house should be frequently syringed, and water given at the roots as often as they may require it; a shaded situation should be chosen for all of them, except geraniums, and others intended to produce seed. Cuttings may be taken of any plants it is desired to have a large stock of. Repot seedling plants; cut down geraniums that have done flowering, and propagate all desirable kinds; they strike best if planted under hand-glasses in a shaded part of the garden. Attend constantly to climbers; they should be tied rather loosely, as they have a very bad appearance when fastened together in branches. Many of the common cacti may be placed in the open air; these cannot have too much sun; they make their appearance when placed among rockwork. Cyclamen and other bulbs which have done flowering should be gradually dried off or placed out of doors.

Flower Garden. As the various kinds of roses are this month in their greatest perfection, we would advise those who may intend forming a collection, or extending one already formed, to personally inspect the several nurseries at which they are grown, as they may then select and order any admired sort, without fear of being disappointed by the substitution of one plant for another, which will sometimes inadvertently happen by misplacing a label, or some slight orthographical error in the name; we may say the same of ranunculus, or indeed any other florist's flower.

Much of the ultimate beauty of the flower garden will depend on the exertions of this month, and much practical tact is necessary to secure a proportionate and well-arranged bloom; some of the plants in beds will require pegging down, others to be neatly fastened to stakes, and the major part a judicious thinning, nothing renders a plant or even a bed of plants more unsightly than a crowded appearance; this will become more apparent and consequently more necessary as the season advances. Continue to plant out dahlias, and propagate scarce or desirable sorts; cuttings put in now only form pot roots; transplant an-

nuals for succession, and water those newly planted: take care to secure all plants that require it with stakes. China roses may be propagated by cuttings now with success. Top-dress Picottees and Carnations; the opening blooms should be constantly attended to prevent them splitting irregularly; choice kinds should be shaded; layering may be commenced towards the end of the month. Ranunculus beds should be copiously watered, and the finer sorts protected from the sun. Finish planting out all sorts of plants and annuals intended for the flowering beds. Auriculas should be kept in a shaded situation, and frequently refreshed with water: they may be exposed to gentle rains. Polyanthuses require the same treatment, and the seedlings of both may be potted off as soon as they arrive at a sufficient size. Continue to repot tender annuals as they require it, increasing the strength of the soil at each shift; they require plenty of water. The flower pods of pinks should be tied round to prevent them splitting sideways; water them in dry weather, and by the end of the month pipings may be taken.

The present is the best month for budding roses; in doing this we would never advise placing more than one sort on each stock; for unless the habits of the several ingrafted sorts are exactly similar the strongest will certainly take the lead, as it is termed, thus depriving the others of their necessary nourishment. Any that may be infested with aphis should be syringed with tobacco-water. Take up the bulbs of Tulips, Crocuses, Hyacinths, &c. as soon as the foliage is dead. Where it is intended to save seed of tulips the pods should be covered with a piece of glass to keep them dry and hasten the ripening. Propagate heartsease for autumn flowering. Pot off chrysanthemums as soon as struck; they may be kept in the shade till established, after which they are better placed full in the sun and watered over head when it is shining on them. Sow biennials and perennials and propagate by cuttings all sorts of the same, as also all kinds of herbaceous plants that are difficult to obtain in any other way. Keep the flower-beds full of flowers and free from weeds; attend generally to the watering of newly planted trees, shrubs, and plants. Grass will require frequent mowing: and as this department is now the most interesting it should have the greatest attention.




ANEMONE.

1. JOSEPHINE —— 2. AZURE INCOMPARABLE.

London How & Parsons July 1, 1841

THE

# FLORIST'S JOURNAL.

JULY 1, 1842.

## ON THE ANEMONE.

WITH AN ENGRAVING OF JOSEPHINE AND AZURE INCOMPARABLE.

THOUGH there are many flowers which at this particular season have claims on our notice, yet we have been induced to select the Anemone from among the numerous beauties intended to embellish our work, because we wish, as far as is practicable, to suit our illustrations to the season; and because this is super-eminently a flower adapted alike for the veriest tyro, the general cultivator, and the more select collection of the florist; in short, no garden is efficiently stocked without them; and yet, though they may be found in the majority, we frequently hear and receive complaints of the partial or entire failure of the bloom of this flower; having this in view, we have thought it might prove acceptable to our friends who are cultivators, to offer a few hints on the general management and method of growing this ornament of our flower borders. The most valuable property of the Anemone is that a bloom may be had of it at almost any part of the year: this makes it particularly desirable for the early spring beds or borders of the parterre; and by a continued or varied planting, a succession of its brilliant flowers may be secured from the earliest period of solar influence till

the return of winter, and even then an occasional one more precocious than his fellows, may be found thrusting its radiated corolla from beneath "bleak winter's mantle, snow." The Anemone for the most part is a native of the more elevated parts of the Continent, in Siberia, Switzerland, Germany; and in the northern parts of the continent of America, several species have been found; three or four are natives of Britain—A. Pulsatilla, and A. nemorosa; the wood anemone are indigenous and have long been favorite inhabitants of our borders; A. hortensis is also well known, though far inferior to the species from which we have selected our drawings; A. coronaria, which is a native of the Levant. There are in all about twenty-seven or twenty-eight species of Anemones: A. coronaria, the subject of this paper may be divided into two classes, the single or poppy anemone, and the double, which is properly a variety or improvement on the first, being obtained from seed of the single varieties, the economy of this part of the wonders of the vegetable world being now pretty generally understood to be the transformation of the stamens of the single flower into petals which form the interior part of the double flower: we shall not occupy more space on the subject, but proceed at once to the general management of this beautiful flower.

The soil preferred by the Anemone is a rather light sandy loam; though in this as in every other point it is very ductile, and may be made to grow on almost any soil, so that it is fresh, for this, as with other plants, will degenerate if grown too long on the same spot of ground. About a fortnight or three weeks before planting, let the ground be well dug over, burying a substratum of about three inches in thickness of cow-dung; this is necessary to secure to the plants a sufficient degree of moisture at the period of blooming, the manure must be kept at a regular depth of six inches from the surface; the best method of planting is to remove the entire surface of the bed to the depth of about two inches or a little more; rake the bottom even, and place the roots firmly on it; the larger ones may be separated, though it is not advisable to reduce them too much, or a weak bloom is the consequence. If it is desired to keep the names to the different kinds, and the bed is square, the name of the sort and situation in the bed may be entered in a book, as is usual with tulips and ranunculus, and if the bed is

of an irregular form, a sketch of the bed should be made on paper, and their respective situations marked on it, the earth may then be returned and raked neatly over; if the roots are planted before the winter, a mulching of half-rotten leaves will be necessary to preserve them from frost; as soon as the foliage appears above ground the names may be put to them. The season of planting must be regulated by the desired time of blooming; the earliest may be planted in September, though for this very early season we should advise that only the single varieties be used; as there would be much danger of losing the double kinds through the winter, if they are subjected to too early an excitement,—in short very choice kinds should not be planted before February, for the more common double and the remainder of the single varieties October is the most preferable month. The first planted generally bloom in March, the second in April, and the third in May; and if a few of the surplus roots are left in the ground, some flowers may be obtained till very late in the autumn, and again very early in the spring; though roots so treated usually dwindle on the second year, so that none but those which can be well spared should be used for this purpose. The subsequent treatment is precisely the same as for Ranunculus; the principal point being to secure them a sufficient degree of moisture when about to blow, and for this nothing is so efficient as a slight covering over the whole of the bed of half-decayed leaves; water must be given copiously if the weather should prove dry, as the slightest check at that particular period is often attended with the consequences of which we have heard complaints; the roots should be taken up as soon as the foliage is dead, and in drying them care should be taken that it is not done too fast, they should be laid thinly on shelves in an airy place, till sufficiently firm to put away. The single or poppy Anemone is readily increased by seed: this should be sown in September, in a warm situation in the flower-garden; they generally bloom the succeeding season, when new colours are sure to be produced, and occasionally double flowers.

The roots of Anemone are, like those of ginger, solid flattened masses, and increased in number by division; a root which has been well grown for two or three years attains a great size, and yet is only one root, and hence the mode of sale is by weight, and the purchaser may divide them when planting.

We cannot conclude this paper better than by giving a descriptive list of some of the choicer varieties of the double Anemone, they are

Josephine, scarlet; Azure incomparable, fine blue: OUR ILLUSTRATIONS.

| | |
|---|---|
| Feu superb, scarlet. | Soldier, vermilion. |
| Rose surpassant, shaded rose. | Couleur de sang, red. |
| Cœlestina, fine blue. | High Admiral, velvety scarlet. |
| Bleu Victorieuse, blue. | Isidorus, variegated. |
| Apollo, rose var. | Henrietta Sontag, red. |
| Rosalia, red and violet. | Albion, white and rose. |
| Duke of York, red. | Circe, rose. |
| Grande Duchesse, variegated. | Rose de Haarlem, rose. |
| Terpsichore rose. | Cerise primo, red. |
| Zebra, variegated. | Amanda rose, red. |
| Reine de Congo, light red. | Constantia, red and violet. |
| Surprise, blue. | Globe Celeste, blue. |
| Beauté des roses, var. rose. | Belle Emilie, var. |

EDITOR.

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## ON CLIMBING PLANTS,

### AS SUITABLE ORNAMENTS OF THE FLOWER GARDEN.

SIR,—I have frequently noticed the almost entire absence of climbing plants in the beds and borders of small flower gardens, and as often regretted the same, for but very few plants possess that pleasing aerial lightness which distinguishes these. By climbing plants it must not be understood to include all those hardy plants, such as ivy, clematis, &c., which, though strictly speaking, are certainly climbers, yet not those alluded to; but even these, if I include the honeysuckle, the jasmine, the ampelopsis, and others of the same character, when in appropriate situations, may be made to contribute largely to the general appearance of a garden, by covering with verdure unsightly objects, or in assisting to form alcoves or verdant passages; and for these purposes the ampelopsis should never be omitted. Its value arising from the very pleasing relief it affords to the

general green of early autumn: its foliage then assuming a rich sanguine hue—and these being permanent plants are of course valuable in their places. But it is of half-hardy climbers I intend speaking. These should have a place in every garden of the smallest pretensions; nor is it any way difficult to find suitable places for these pretty ramblers; they are beautiful either collectively or as isolated objects. Rock work, and root work, grottos and fountains should be annually covered with them; and where these are not found, a few stones and roots may be thrown together, and the climbers, if planted at the base, speedily cover them, forming a most agreeable object; rustic vases and baskets are very proper places for them, and these articles appear in a much more artistical and appropriate light when filled with lowly creepers, or overhung with festoons of the natural flowers and foliage of climbers, than when occupied with stiff looking geraniums or other plants of a similar growth; and even the flower beds may be filled to great advantage with plants that are naturally climbers. By placing a few small bushes loosely on the surface of the bed, the plants will be enabled to cover the whole of it in a very short period, and as all of them are very abundant bloomers, and generally of a robust constitution, the display is not inferior nor less enduring than that of any other plant.

In planting them, in whatever situation they may be placed, a light rich soil of a good depth must be ensured. Sometimes, when they are used to cover rock or root work, they are stuck into a small fissure of the stones, or hole in the roots, with scarcely a handful of soil and there left of course to perish, and from it are perhaps given a bad name, and the culture of them discontinued; but such plants were never allowed a fair chance not even for their lives, much less of developing their several beauties; I would recommend them to be planted always at the base of whatever they are wished to cover, with a free scope for the roots, selecting tall-growing species for the top and dwarfer ones for the bottom of the subject. If, indeed, the summit should be so high that they do not reach it in a season, it had better be covered with some permanent hardy climber; but in a tolerable good soil and situation, many of the half-hardy sorts, such as cobea, &c., will attain a height of twenty or thirty feet with corresponding branches. Of those plants most suitable for the open air, I

may mention first Cobea scandens and stipularis: these, as before remarked, frequently run thirty feet in a season; they may be increased by cuttings taken off when about three inches long and planted in a pot of leaf-mould and white sand without displacing the leaves; cover them with a small glass and plunge them in a gentle hot bed; they do not, however, root very readily. The best manner of raising them is from seed: it should be sown early in March, on a gentle heat; and as soon as the plants have four leaves, they should be potted and kept in a cold frame or greenhouse till the time for planting in the open air, which is best done about the middle of May. The flowers are large; those of scandens are at first green, and afterwards change to a deep purple. Stipularis is yellow.

Maurandia Barclayana and semperflorens. These usually grow about ten feet high and full of small flexuous branches bearing a profusion of flowers; those of Barclayana are purple outside, the inside is white; and those of semperflorens are rose-coloured; they are very readily increased, either by cuttings or seed if treated as recommended for cobea. They are very beautiful, and equally adapted for all the purposes mentioned; they are also excellent window plants, bearing the confined air, and may be pruned and trained to any shape.

Lophospermum erubescens and scandens, are both beautiful plants growing fifteen feet; the flowers are large and borne in great profusion. Those of erubescens are rose-coloured with a mottled throat; and of scandens somewhat similar, but darker; they may be propagated, the same as Maurandia, and with as much ease.

Eccremocarpus scabra is the popular, though rejected, name of another handsome climber; the flowers of this are of a bright orange colour, mixed with crimson. This seldom exceeds six feet, but is very luxuriant; it is increased by seed easiest: it should be sown as for maurandia.

Tropeolum aduncum, and in good situation pentaphyllum. The first is an annual with bright yellow flowers; it will run fifteen feet; it is of the easiest culture, requiring the treatment of half-hardy annuals. T. pentaphyllum is a tuberous-rooted species, most suitable for the bottom, as it does not run above five or six feet; the flowers are scarlet and green—it is propagated from cuttings; the root should be taken up and kept in a

greenhouse through the winter. Loasa aurantiaca is another half-hardy annual climber: the flowers are deep orange, marginated with red; it runs from five to ten feet—requires the usual treatment of such annuals.

Thunbergia alata, alata alba, and aurantia will be found beautiful plants most suitable for the base of rock work, or for vases or baskets. In the latter situation, when mixed with Lobelia heterophylla, or gracilis, or any other small creeping plants of another colour, they are truly beautiful. The colour of the first is pale buff, the thorax dark purple or velvet; the second, as the trivial name implies, is pure white, with a throat resembling alata; the third, or aurantia, is a beautiful deep orange-colour, thorax the same as the others. They are readily propagated from cuttings during the summer months, requiring a gentle bottom heat; the plants are usually kept in the greenhouse through the winter, and there form highly ornamental subjects. We have selected these as the most common and, at the same time, the most useful, as our observations apply more particularly to small suburban gardens than to those under the care of professional gardeners, to whom, of course, what I have said is already known; but even to the wise a hint is sometimes useful. The plants we have mentioned will, in most cases, be found sufficient; additions may be made to them from those which are more tender and, consequently, rare, as may suit the cultivator's own taste or convenience, as there are many others of equal beauty, especially in convolvulaceæ, two of which we cannot pass over without a notice—indeed the order is redolent of beauty, even the common convolvulus major possesses many claims; but those we would particularly mention are Ipomea rubrocerulea and Learii, both of them bearing noble flowers: the first of a bright azure, the other a fine ultramarine; both extend ten or fifteen feet; but require a good situation. In a greenhouse they attain a much greater size and form handsome additions; they are both propagated by cuttings, which require a slight bottom heat. The first is also raised from seed which it perfects best under glass.

In conclusion, I may remark that not a single fence, or the trunk of a tree, or any other object capable of receiving or supporting a plant, ought to be left uncovered, the free use of climbing plants imparting an inexpressible air of freedom and friendship wherever they appear. W. W.

FULHAM; June 1842.

## ON THE CULTURE OF THE PINK

SIR,—Having now arrived at the season of blooming, it may not be unacceptable to some of your readers to offer a few remarks on the culture and general management of that much esteemed florist's flower. The best mode of increasing is by piping under a close hand-glass in a mixture of leaf-mould, decomposed manure, and silver sand, in proportions of one peck of the latter to three of each of the former, finely sifted, so that the piping may be inserted without the use of a dibble: the best time for performing this operation is about the last week in June. It is the practice of many growers to strike on a very moderate hot-bed, but I have always been successful without, and certainly the young plants are much stronger and more hardy. I should be very glad to find more attention devoted to raising new varieties from seed, as it is not only interesting but profitable. I collect the seed when ripe from the best rose-leaved flowers, and sow the following May on a gentle hot-bed; when the pipings have been in three weeks, they will most likely require a little air administered by degrees, so that the hand-glass may be entirely removed about the fifth week, when they may shortly be taken from the striking bed, and transplanted at three inches apart, where they are to remain till the season for general planting, which is about the middle of September; I then prepare my bed by introducing some fine old cow dung, dug in a foot below the surface, and if the ground is light, some strong loam will be very beneficial. Almost every grower has a different plan of planting, but I think there is no better way than planting four plants, in a clump, say three inches apart, as you would a hole of cucumbers, so that a stick may be placed in the centre to support the glass or shade, which will then cover the four flowers, of which the following are amongst the best:

Hundswarth's Omega.
Duke of Wellington.
Captain D. Dundas.
Coronation.
West Kent Hero.
Hartstone's Victoria.
Robinson's Hero.
——— William.
Bray's Invincible.
Dry's Uxbridge.
Bexley Hero.
Lady Hollywell.
Nevill's Hope.
Norman's Defiance.
Hopkins's one of the ring.
Lady Acland.
Triumphant.
Vandenburgh's King.
Stevens' Lord J. Russell.
Earl of Stafford.
Agate's Prince Albert.
———Hero of Claydon.
———Sir Robert Peel.
Dr. Coke Smith's.
Well's Rival.
Brown's Sophia.
Creed's President.
Thurtell's Mile End Defiance.
Seale's Miss Austin.
White's Warden.
Aker's Lord Brougham.
Young's Joe Miller.
Burchett's Young John.
Dakin's Burdett.
Cupping's Duke of Bedford.
Cousins's Little Wonder.
Ibbett's ditto.
Harris's Emma.
Stevens's Hon. G. Cook.
Thurtle's Indispensable.
Willmer's Queen Victoria.
Norman's St. Creed.
Church's Tom of Lincoln.
Willmer's Tom Davey.
Kelson's Emma.
——— Countess of Ely.
Cousins's Beauty of Kent.

In May, as they throw up for bloom, spindle (that is, to remove all the superfluous buds), according to their sorts; some will only support one good bloom, others must have three or four, otherwise it is impossible to get them open without bursting. When I have performed this operation I give the bed a top dressing of liquid manure, poured on very thick, so that there will be a crust on the top when dry; this keeps them cool and moist through the hot weather. They will now want watching daily, to tie the pods with bass to keep them from bursting, &c.

In September I select the intermediate sized plants, taking care to have a better stock of some kinds than others, according to their merits.

In February I hoop my beds over with sticks, to be prepared to cover, so as to protect from the harsh spring winds.

In showing for competition be careful in not having two flowers similar, and all as near the same size as possible, keeping the largest at the back, if any.

It is a very good plan to lay a little short grass on the beds in bloom, to prevent the rain splashing the flowers.

E. F. Fairburn.

Blackheath; *June* 17, 1842.

## LIST OF NEW PLANTS.

Didynamia Angiosperma—Verbenaceæ.

*Clerodendrum Splendens.* A climbing species of a genus already known and admired. The present subject will be found a most desirable acquisition to every collection of stove plants; received by Mr. Knight, of the King's Road, Chelsea, from Sierra Leone. The plant is a handsome evergreen climber, delighting in a shaded situation in the stove, and should be placed in rich loamy soil; the flowers are produced abundantly on terminal panicles of a rich scarlet; introduced in 1840.—*Pax. Mag. Bot.*

Pentandria Monogynia—Lobeliaceæ.

*Lobelia heterophylla, var. Major.* An improvement on the pretty L. heterophylla. The entire plant, and more especially the flowers, being much larger and more abundant; seeds were imported by Mr. Low, of Clapton, from the Swan River Colony, in 1840. It requires the usual treatment of half-hardy annuals. —*Pax. Mag. Bot.*

Didynamia Angiosperma—Gesneriaceæ.

*Achimenes pedunculata.* Another beautiful addition to this interesting genus; it was found in the shady woods of Santa Maria, in Guatemala, by Mr. Hartweg, who sent it to the Horticultural Society, in whose gardens it flowered for the first time in September, 1841. The flowers are large, numerous, and of a peculiar deep scarlet, richly marked with rows of crimson spots. The period of flowering is summer and autumn. —*Bot. Reg.*

Gynandria Monandria—Orchidaceæ.

*Eria Polyura.* A very pretty and easily cultivated species. Requiring the same treatment as Dendrobium, &c.; sent by Mr. Cumming from Manilla to Messrs. Loddiges, with whom it flowered in 1841.—*Bot. Reg.*

Polygamia Monœcia—Leguminosæ.

*Mimosa Uruguensis.* A pretty greenhouse shrub; seeds were received from Buenos Ayres, by the Hon. W. F. Strangways, and given to the Horticultural Society, where it was flowered in June, 1841. The treatment of this genus is so generally understood as not to require any remark; flowers numerous—pink. —*Bot. Reg.*

Octandria Monogynia—Omagraceæ.

*Fuchsia Cordifolia.* This species is sometimes confounded with the numerous hybrid varieties now in cultivation, but it is a distinct species; it was found by that indefatigable collector, Mr. Hartweg, on Ketucha, a Volcano in Guatemala, at a height of 10,000 feet above the sea, which circumstance should be borne in mind by the cultivator, as from it we may infer the plant is constitutionally robust and may probably withstand the severities of our winters; but even if not hardier than those already known to us it will be found a desirable species. The plant is shrubby, producing numerous spreading branches with graceful heart-shaped leaves, with a sufficiency of flowers. They depend elegantly on long-curved peduncles, and are often three inches long; the tube is of a rich hue, between crimson and scarlet, gradually passing to orange and yellow, segments green, petals also green. Stamens conspicuous, of a bright yellow.—*Pax. Mag. Bot.*

Gynandria Monandria—Orchidaceæ.

*Epidendrum Phœniceum.* A beautiful species, imported from Cuba, by Messrs. Loddiges, in 1840. Differing from E. adenocarpon principally in the superior brightness of its colouring—and in the structure of the lip, which in this species has two elevated plates at its base, and in the absence of radiating veins. —*Pax. Mag. Bot.*

Icosandria Monogynia—Cactaceæ.

*Cactus Alatus.* A native of the Organ Mountains. The flowers are yellow and produced on the margins of the compound oblong joints of the plant; it is a singular and handsome species; introduced in 1837.—*Bot. Mag.*

Pentandria Monogynia—Ericaceæ.

*Azalea Altaclerensis.* A beautiful hybrid, raised at Highclere, a seat of the Earl of Caernarvon, from seed of A. sinensis; impregnated with A. rubescens major; it is an excellent union of the two, possessing the deep glaucous foliage and inflorescence of sinensis with the colouring of rubescens major. It is a profuse bloomer and highly odoriferous.—*Bot. Reg.*

Didynamia Angiosperma—Verbenaceæ.

*Lantana Selloviana, var. Acutifolia.* Raised from seeds sent from Monte Video, by Mr. Tweedie, to the Glasgow Botanic Garden—chiefly distinguished by the foliage being larger and longer.—*Bot. Mag.*

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## THE FLORIST'S LETTER-BOX.

### TO CORRESPONDENTS.

K. D., Hornsey road.—The entire genus Thunbergia are persistent plants, though T. alata, alata alba, and aurantia are frequently treated as annuals, yet each and all of them may be readily increased by cuttings during any of the spring or summer months. To do this, take off the cuttings when about three inches in length, put them in a pot filled with light peat earth and fine white sand in equal quantities; give them a gentle watering when first inserted, cover them with a small bell-glass, and plunge the pot in a gentle bottom heat; they speedily emit roots when they should be potted off, using a similar compost with the addition of a little loam, a warm situation in the greenhouse will preserve them through the winter. To perfect seeds, the plants had better remain under glass all the summer, with a free exposure to the sun and air, frequent syringing is necessary, as the plants are very subject to attacks from red spider.

Abutilon striatum will be found to succeed best in a situation similar to that recommended for Thunbergia, namely, a warm greenhouse, the soil most suited is a mixture of loam, peat, and leaf-mould, in equal quantities, well incorporated, and a thorough drainage must be secured. If large specimens are desired, abun-

dant room should be allowed the roots, but by frequent shifting they often become too large for an ordinarily sized greenhouse; we have one now standing in a tub containing about two bushels of earth, which is twelve feet high, and nearly as much in circumference: so that K. D. will perceive the size of the pots should be regulated by the desired size of the plants. The Abutilon may also be placed in the open air during summer, but both the foliage and flowers are smaller. Some further particulars may be found at page 40 of the first volume of the Florist's Journal.

A Young Amateur—is troubled with the most destructive insect possible among Picottees, the wireworm,—and what is worse they are very difficult to exterminate. The only available method now is to place traps of sliced potatoes or turnips about two inches below the surface of the earth, which should be frequently examined. During the winter the ground must be thoroughly and often turned up, so as to get the greatest possible quantity of it frozen through.

H. S., Barnet.—The propagation of Cacti is performed in this manner: The cuttings, when taken off, are laid to dry for about a fortnight; they are then potted in light sandy loam and leaf-mould; sufficient water is given to settle the earth about them and *no more:* they require to be kept barely moist till rooted. When potted off, the soil should be loam, leaf-mould, and old mortar, in about equal quantities.

## CALENDAR FOR JULY.

STOVE. If there are any plants yet requiring a shift, it had better be done immediately. One general rule should be constantly borne in mind in repotting stove-plants, to use the soil as rough as possible, especially if the plants are to be placed in large pots; in such cases nothing can be worse than finely-sifted earth, which in a very short time from the quantity of water necessarily used in this department, will become a completely sodden mass. Specimen plants in bloom may be removed to the greenhouse, which will greatly prolong the period of flowering beside increasing the intensity of the colours. It is most essential at this season that a due proportion of moisture be kept up: this may be done by syringing on plants not in flower, and in addition the paths should be completely saturated every morning and evening, and the higher the rate of heat so much the greater quantity of moisture is necessary; that is, atmospheric moisture; watering at the roots being a distinct thing, and must be regulated by the cultivator's own judgment. Regular attention must be paid to all climbing plants, or they soon become unsightly; the growth of all the plants should be regulated by frequent stopping, pruning, &c. Watch for the first appearance of insects, as it is only then that any remedy can be effectually applied. Propagation may now be successfully done; pot off seedlings, and repot young plants as they may require it. An awning is now a very necessary appendage, unless there are climbers sufficient to cover the entire roof, as plants which are natives of tropical woods suffer severely from exposure to the sun.

GREENHOUSE. As the larger and strong growing plants are now out of doors, those which remain should be equally distributed throughout the house, that they may have the benefit of a free circulation of air. If any of the plants belonging to Ericaceæ, or those which have small fibrous roots are retained in the house, they should have their pots covered from the sun,

either by placing them in a larger pot, or by surrounding them with moss; the death of the plant, or at least loss of great part of its roots is frequently caused by the sun heating the side of the pot. The unoccupied spaces should now be filled with Balsams and other tender annuals; but previous to filling and arranging the house for summer, it would be well to see if any repairs are required: this is often left till too late; every plant structure should be painted every season, if it were only for the destruction of insects. The syringe may be freely used on all plants not in flower, others will require watering liberally sometimes twice a day; the foliage of large plants such as Camellias, Oranges, &c. should be frequently washed with a sponge and soft soap. Any desirable kinds of plants may now be propagated; a great many Ericas and other hard-wooded plants, which can only be struck at this particular season, will now succeed with but little trouble if allowed a cool shaded situation. Climbers and free growing plants should be pruned, thinned, and tied in their most natural positions. Cacti and other succulents not in flower, should have a full exposure to the light and sun and air. All the air possible should be admitted to the house during the day, and about half the quantity at night, unless the weather happens to be very wet or windy.

Flower Garden. Very great, varied and constant attention is necessary in this department. Dahlias and other tall plants must be carefully and constantly secured to their sticks. Continue to bud roses: in doing this we would discountenance all attempts to place more than one variety on each stock, being convinced that two or more sorts on one stem, ultimately spoil or destroy each other. Picottees, Carnations, &c. should be layered; attend to the blooms; if seed is desired the calyx should be torn off down as far as the seed vessel, to prevent earwigs secreting in them; pansies should be cut back to produce a good autumnal bloom. Take up Tulips and Ranunculus as soon as the foliage is dead, also all bulbous-rooted plants. Constantly fill up vacancies as they occur in the beds and borders of the flower garden. Water all newly-planted flowers; a second bloom may be obtained from several kinds of plants and flowers which bloom at this season, by a judicious thinning or pruning back: we may mention the early sorts of roses, althea frutex, most

perennials, and many annuals; of the latter a reserve should always be kept in pots ready for turning out whenever they may be required. Chrysanthemums should have a liberal supply of water every day, and once a week liquid manure may be applied, greenhouse plants in the open air require a liberal supply, in placing them some regard should be had to their natural habitat; thus New Holland and Cape plants usually succeed under the same treatment; and yet a strongly marked difference exists between them and others called also greenhouse plants, and by this attention to geographical arrangement much trouble will be spared the cultivator too obvious to need mentioning. Auriculas and Polyanthus should have a shaded and yet airy situation, water should be given them frequently in small quantities, sow and propagate by cuttings all desirable kinds of biennials and perennials. The general routine of mowing, sweeping, clearing from weeds, &c. will require increased attention this month.

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## LITERARY NOTICE.

### THE FIRST BOOK OF BOTANY. By Mrs. LOUDON.

In this little unpretending work, Mrs. Loudon has been very happy in simplifying the more abstruse points, and thus rendering the science of Botany easy of attainment; this is what a first book should be. The arrangement of the work is good, the explanations clear, concise, and yet sufficient; and we think it essentially useful as a "first step" towards the attainment of that delightful study, Botany, or a knowledge of plants.

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YOUELL'S DUKE.

London Rose & Parsons July 1842

## FLORICULTURAL INTELLIGENCE.

### HORTICULTURAL SOCIETIES.

*June 11th.* CHISWICK. The second show of the Horticultural Society took place in the Society's gardens. The show of plants was extremely good and numerous. The best large collection of miscellaneous plants, of from 50 to 60 species, was shown by Mr. Green, and contained splendid specimens of Tyrias, Gloxinias, Azaleas, Tropæolums, Lechenaultia biloba, Pimelea decussata, Ericas, &c. Mr. Goode, gardener to Mrs. Lawrence, Ealing Park, had also a very fine collection: among them were Francisea latifolia, some Boronias, Ixoras, Azaleas, and a fine specimen of Euphorbia splendens. Mr. Hunt, gardener to Miss Trail, of Bromley, exhibited a very good collection; and the small collections, of from 15 to 20 species, of Mr. Barnes and Mr. Goode, contained beautifully-grown plants. The Roses were very good, but we think not so numerous as on former occasions, at the same season; the day was so extremely hot that many of the cut flowers suffered considerably. The Geraniums were never better. Mr. Catleugh exhibited a fine collection, containing Florance, Madelina, Victory, Lifeguardsman, Lord Mayor, Priory Queen, Coronation, Hannah, Una, Selina, Orange-Boven, and Foster's Prince Albert. Mr. Gaines' 12 were Alba perfecta, Coronation, Jewess, Sylph, Erectum, Cerito, Victory, Beatrice, Raphael, Grand Duke, Leilia Jones, and Exquisite; Catleugh's 6 were Jewess, Victory, Ophelia, Lord Mayor, Madonna, and Beatrice. Mr. Wholmes, gardener to E. Foster, Esq., exhibited four seedlings, one, called Sir R. Peel, is a beautiful flower; the others were named Sultana, Nestor, and Sunshine. Mr. Beck, of Isleworth, had also a stand of seedlings; one called Leonora, is a very good flower, another of Mr. Beck's, called Meteor, appears a promising variety. Mr. Pamplin, of Hornsey, exhibited a good seedling, called Duke of Devonshire. A large collection of Ranunculus were shown by Messrs. Lockhart, of Cheapside,

containing splendid flowers of the following kinds:—Prince Albert, Argo, Monon, Tartan, Avenger, Dollond, Constantia, Lady Flora Hastings, Sir James Graham, Major Laing, Quintillian, De Buffon, Ville de Paris, Quixos, Anastatius, Memorial, Numa, Waterman, Splendour, Magellan, Mars, Pliny, Olivia, Hamlet, Florida, Post Captain, Nydia, Pearl, Olinthus, Chanticleer, Hermes, Barbour, Blenheim, Triton, Talisman, Solace, Œil noir, and several seedlings, all of them, except the last-named, are Scotch varieties.

Pinks were shown by Mr. Wilmer, of Sudbury; one, a seedling, called Albert Prince of Wales, is a good bold flower; the Pansies were no way remarkable; nor were the Calceolarias so fine as we have witnessed them. Among Orchideæ were fine specimens, Oncidium altissimum, O. flexuosum, O. papilio, *var.* O. Harrisonia, Cattleya Mosseæ, C. Mosseæ atropurpurea, C. M. pallida, Vanda teres, V. Roxburghii, Broughtonia sanguinea, Saccolabium præmorsum, a new species of Calanthe, and a splendid plant of Dendrobrium maculatum.

From the great press of matter this month we are obliged to pass over plants and flowers, which, had we room, are well deserving particular notice. Prizes awarded: *

Large collection of Miscellaneous plants, 50 to 60 species..G.K., Mr. Green, gardener to Sir E. Antrobus, Bart.; ditto, G.B., Mr. Goode, gardener to Mrs. Lawrence, Ealing Park; ditto, S.G., Mr. Hunt; ditto, Miss Trail, Bromley.

Small collection of ditto, 15 to 20 species..G.B., Mr. Barnes, gardener to W. Norman, esq., Bromley; L.S., Mr. Goode; G.B., Mr. Catleugh, N., Chelsea; L.S., Mr. Pawley, N., Bromley; S.K., Mr. Jackson, N., Bagshot.

Collections of 6 species..L.S., Mr. Clarke, gardener to T. Smith, Esq.; S.K., Mr. Bruce; ditto, Boyd Miller, esq.; S.B., Mr. Falconer; ditto, W. Palmer, esq.; S.K., Mr. Frazer, N., Lea Bridge Road.

Collection Climbers..G. B., Mr. Goode.

Orchideæ, 6 species..G.B., Mr. Mylam, gardener to — Rucker, esq.; L.S., Mr. Barnes; G.B., Messrs. Rollison, N., Tooting.

Single specimen of ditto..L.S., Mr. Mylam, for Saccolabium præmorsum; S.K. Mr. Bruce, Oncidium flexuosum; S.B., Mr. Edmonds, Peristeria pendula; L.S. Messrs. Rollisson, Saccolabium guttatum.

Single specimen of Ornamental Plants..L.S., Messrs. Veitch, of Exeter, for Erica depressa; L.S., Mr. Bruce, Ixora coccinea; S.K., Mr. Harding, gardener to the Rev. F. Beadon, statice grandiflora; S.K., Mr. Catleugh, N., Gardenia radicans; S.K., Mr. Story, F.H.S, Erica splendens; S.B., Mr. Goode, Achimenes longiflora; S.B., Mr. Goode, Pavetta caffra; S.B., Mr. Barnes, Ixora coccinea; S.B., Mr. Bruce, Elichrysum humile; S.B., Mr. Falconer, Polygala oppositifolia; Cert. Mr. Barnes, Lechenaultia formosa; ditto, Mr. Falconer, Erica depressa; ditto, Mr. Bruce, Achimenes longiflora; ditto, Mr. Saulter, gardener to J. M. Yeeles, Bath, Erica tricolor; ditto,

* N., prefixed to the name of an exhibitor, signifies nurseryman. The letters G.K., G.B., &c. relate to the prizes: thus, G.B., Gold Banksian medal; G.K., Gold Knightian, ditto; S.G., Silver gilt ditto; L.S., Large Silver ditto; S.K., Silver Knightian; S.B., Silver Banksian; and Cert., Certificate of Merit, two of which are equal to one Silver Banksian medal.

Mr. Forrest, N., Statice arborea; ditto, Mr. Gaines, N., Seedling Digitalis; L.S., W. H. Story, Esq., F.H.S., Hybrid Ericas.

Cape Heaths, 20 species..G.B., Mr. May, gardener to E. Goodheart, Esq., Beckenham; S.G., Mr. Barnes; L.S., Mr. Goode, S.G.; Mr. Jackson, N.

Collections of 6 species, ditto..L.S., Mr. Hunt; L.S., Mr. Pawley, N.

Tall Cacti, in flower..L.S., Mr. Bruce; S.K., Mr. Falconer.

Geraniums. Large collections..G.B., Mr. Bell, Chelsea Hospital; S.K., Mr. Bromley, gardener to Miss Andersson, Hammersmith; G.B., Mr. Catleugh, N.; S.G., Gaines, N.

Geraniums. Small collections..S.G., Mr. Bowen, gardener to Sir E. Paget, Chelsea Hospital; L.S, Mr. Hunt, ditto; Miss Trail, Bromley; S.G., Mr. Catleugh, N.; L.S., Mr. Gaines, N.

Moss Roses..S.K., Messrs. Rivers, N., Sawbridgworth; S.B., Mr. Cobbett, N., Horsall, near Woking.

Common Garden Roses..L.S., Mr. Milne, gardener to C. A. Chauncey, esq.; S.B., Mr. Leslie, ditto; J. Fleming, esq., F.H.S.; S.K., A. Rowland, esq., F.H.S.; L.S., Messrs. Paul, N., Cheshunt; S.B., Messrs. Lane, N., Berkhamstead; S.B., Messrs. Rivers, N. Sawbridgworth; S.K., Messrs. Dennis, N., King's Road, Chelsea; S.K., Messrs. Wood, N., Maresfield; S.K., Cobbett, N., Horsall.

China Roses..Mr. Leslie; S.B., A. Rowland, Esq., F.H.S.; S.B., Mr. Toy, gardener to — Ralston, esq., F.H.S.; S.K., Mr. Milne; L. S., Messrs. Lane, N.; S.B., Mr. Cobbett, N.; S.B., Messrs. Wood, N.; S.K., Messrs. Rivers, N.; S.K., Messrs. Paul, N.

Calceolarias herbaceous..L.S., Mr. Barnes; S.B., Mr. Catleugh, N.

Caceolarias shrubby..L.S., Mr. Barnes; L.S, Mr. Gaines, N.; S.K., Mr. Catleugh, N.; S.B., Mr. Joynes, gardener to — Hall, esq.

*Seedling Florists' Flowers.* Pelargoniums..S.K., Mr. Wholmes, gardener to E. Foster, esq., for Sultana; S.K., ditto, ditto, Sir R. Peel; S.K., ditto, ditto, Sunshine; S.K., ditto, ditto, Néstor; S.K., Mr. Beck, of Isleworth, Leonora; S.K., Mr. Green, for a collection of Calceolarias; S.B., Mr. Pamplin, N., Pelargonium; Duke of Devonshire; certificate to Mr. Beck, for Pelargonium Meteor: Mr. Barrett, ditto, Model of Perfection; Mr. Barnes for seedling Calceolarias Delicata, and Shrubby Perfection; and Mr. Green, ditto, Unique and Purpurea grandiflora; S.B., Messrs. Lockhart for large collection of Ranunculus; and S.B., Mr. Wilmer's collection of pinks.

*April* 13. HAMMERSMITH. The third annual Auricula Show took place at the Thatched House Inn, Hammersmith. The following prizes were awarded.

Best pair..Page's Champion and Hudson's Apollo, Mr. Gaines; 2. Grime's Privateer and Page's Champion, Mr. Lidgard; 3. Colonel Taylor and Grime's Privateer, Mr. Wilmer.

A seedling prise was given to Mr. T. Dickson, of Brixton, for a beautiful green-edged flower with a very dark ground. The plants shown were fine specimens.

*May* 31. HAMMERSMITH. The first show of the Heartsease Society was held at Mr. Lidgard's, and, although the Society is quite in its infancy, the exhibition was very excellent, and far surpassed anything of the kind before; the flowers being in high perfection, and the competitors very numerous. Prizes awarded:

Class 1. Amateurs, 24 Blooms, 1..3*l.* to Mr. Edmonds, Wandsworth-road, for Grand Duke of Russia, Thomson's Delicata, Bridge's Lady Peel, Mulberry Superb, Eclipse, Miss Stainforth, Vivid, Beauty of Hitchin, Yellow Defiance, Jewess, Curion, Tippoo Saib, Duke of Devon, Edmonds's Freak, Robespierre, Una, Imogene, Russian Duke, Miracle, Herbert, Flora Superb, Desirable, Prince Albert, and Giantess.

2. 1*l.* 10*s.*, to Mr. Bridges, of Hampton, for Rival Duke, Bridges's Purple Perfection, Imogene, Lady Peel, Hamlet, Lane's Purple, Jehu, Lidgard's Jewess, Thomson's Delicata, Thomson's Rival Yellow, Pratt's Queen, Eclipse, Miss Stainforth, Eliza, Brown's Curion, Bridesmaid, Marmion, River Lea Rival, Fairy Queen, Olympia, Superb, Pontiff, Angelina, Robespierre, and Grand Turk.

3. 1*l.* Mr. Bridges, of Carshalton, for Grand Duke of Russia, Vivid, Eclipse, Pearl,

Giantess, Alpha, Bridges's Falconer, Bridges's Carshalton Hero, Bridges's Mrs. Bridges, Bridges's Lady Peel, Bridges's Cream, Henbrey's Sambo, Diogenes, Eringa, Page's Wellington, Curion, Lidgard's Jewess, Warren's Jewess, King's Sovereign, King's Champion, Lady Fuller, Baroness, and Bathonia.

4. 15*s*., to Mr. Gillingham, Turnham-green, for Vivid, Miss Stainforth, Eclipse, Peter Dick, Miracle, Jewess, Grand Duke, British Queen, Flora Superb, Lee's Superb, Ultra Flora, Beauty of Hitchin, Lane's Wellington, Juliet, Coronation, Prince Albert, Colonel Dundas, Amulet, Olympia, Sovereign, Imogene, Argo, Sylph, and Launcelot.

5. 10*s*., to Mr. Bragg, Slough, for Cook's Standard, Cook's Perfection, Countess of Orkney, Ion, Launcelot, Curion, Mulberry Superb, Maid of Honour, Brown's Crœsus, Lidgard's Jewess, Vivid, Thomson's Prince Albert, Hale's Invincible, Bathonia, Hale's Launcelot, Miss Nugent, Cook's Prince Albert, Garrick, King's Champion, Figaro, Miss Stainforth, Duke of Devon, Brown's Jewess, and Boldero.

Nurserymen, 36 Blooms..1. 2*l*. to Messrs. Mountjoy, of Ealing, for Dr. Lindley, La Superbe, Azurea, Thomson's Warrior, Ditto Mabel, British Queen, Captivation, Bloomsbury, Miss Stainforth, Beauty of Hitchin, Silverlock's Prince Albert, Thomson's Desirable, Lidgard's Jewess, Thomson's Jehu, Flora M'Donald, Curion, Duchess of Richmond, Eclipse, Delicata, Sir John Sebright, Nymph, Duchess of Oldenburgh, Lane's Coronation, Thomson's Yellow Defiance, Boldero, Chevalier, Ultra Flora, Olympia, Vivid, Smith's Beauty of England, Juliet, Mountjoy's Negro, Flora Superb, Launcelot, Rival White, and Ealing Hero.

2. 1*l*. 10*s*., to Mr. Brown, of Slough, for Cook's Prince Albert, Ditto Perfection, Ditto Defiance, Ditto Invincible, Ditto Royal Standard, Ditto Mulberry Superb, Brown's Countess of Orkney, Ditto Jewess, Ditto Curion, Ditto Crœsus, Ditto Oberon, Ditto Sarah, Ditto Admirable, Ditto Ion, Ditto Midas, Ditto Figaro, Nymph, Thomson's Eclipse, Ditto Jehu, Ditto Miss Stainforth, Ditto Cowper, Ditto Corunna, Ditto Delicata, Ditto Warrior, Ditto Prince Albert, Ditto Duke of Devon, Ditto Diadem, Miss Nugent, Sulphurea elegans (King's) Ruby, Village Maid, Jewess, Peter Dick, Bathonia, Amulet, and Admiral Keppel.

3. 1*l*. to Mr. King, of Iver, for Invincible, Diogenes, Alert, Ealing Hero, Jehu, La Superbe, Miss Stainforth, Jewess, Great Western, Eclipse, Lady Campbell, Indian Chief, Robert Burns, Curion, Kings' Sulphurea elegans, Vivid, Carlo Dolce, Lane's Coronation, Ditto Juliet, Transport, Victory, Splendidum, Giantess, Boldero, St. Paul's, Grand Duke, Miracle, Brutus, British Queen, Sir John Reid, Rapid, Champion, Olympia, Garrick, Dr. Lindley, and Lane's Queen Adelaide.

4. 10*s*. to Mr. Henbrey, of Croydon, the flowers not named.

Best Seedling, 1*l*. 7*s*. 6*d*. to Mr. Cook, of Princes Risborough, for Alicia, a very beautiful white; 2*l*. 7*s*. 6*d*., to Mr. Mountjoy, Ealing, for Zebra; 3*l*. 5*s*. to Mr. Downton, Hampton, for Attila; 4*l*. 3*s*. 6*d*. to Mr. Downton, ditto, for Dr. Syntax.

We understand that the professional florists gave up their prizes for the benefit of the funds of the Society, in order more firmly to establish its success.

*April* 28. BIRMINGHAM. The first exhibition of the Birmingham and Midland Floral and Horticultural Society was held at the Town Hall. Prizes awarded :

Auriculas..Premier, Ne plus ultra, Mr. S. Bunn.

Green-edged..1. Oliver's Lovely Ann, Mr. J. Britten; 2. Taylor's Ploughboy, Messrs Pope & Sons; 3. Lord Bridport, ditto.

Grey-edged..1. Ne plus ultra, Mr. S. Bunn; 2. Conqueror of Europe, Mr. F. S. Flindell; 3. Conqueror of Europe, Mr. S. Bunn.

White-edged..1. Taylor's Incomparable, Messrs. Pope; 2. Wood's Delight, Mr. Wallace.

Self..1. Oddy's Rest, Mr. Wallace; 2. Lord Leigh, Mr. Bunn; 3. Mr. Wallace.

Alpines..1. Lovely Ann, Mr. J. Haines; 2. Fair Rosamond, Mr. Wallace.

Seedlings..1. Mr. Coudrey; 2. Mr. Wallace.

Polyanthuses..(not named) Seedlings 1 & 2. Messrs. Pope & Sons.

Hyacinths..1. Groot Voorst, Mr. Coudrey; 2. Elizabeth, Mr. J. Moore.

Pansies..(not named) Seedlings 1 & 2. Mr. T. Mellon.

Orchideæ..1. Maxillaria Harrisonii, A. Kendrick, esq.; 2. Oncidium Acridum guttatum, ditto.

Stove Plants..1. Aphelandra cristata, Josiah Mason, esq.; 2. Euphorbia fulgens, Messrs. Pope & Sons; 3. Glorinia Maxima, A. Kendrick, esq.

Greenhouse Plants..1. Chorizema Henchmanii, J. Mason, esq.; 2. Tropæolum tricolorum, ditto; 3. Clematis Sieboldii, Mr. P. Kenway.

Ericas..1. Mundula, Messrs. Pope; 2. Ardens, Mr. J. Coudrey.

Camellias..1 & 2. Mr. J. Moore.

Geraniums..1. Climax, J. Upfill, esq.; 2. Seedling, J. Mason, esq.; 3. Duchess of Devon, ditto.

Roses in Pots..1. Smith's Yellow Noisette, J. Upfill, esq.; 2. Odorata, J. Mason, esq.

Herbaceous, or Frame Plants..1. Epimedium Violaceum, Messrs. Pope & Sons; 2. Trillium Grandiflorum, Mr. J. Moore; 3. Androsace Carnea, ditto.

Oranges..1. Mr. J. Moore; 2. A. Kendrick, esq.

*Extra Prizes*..Cineraria, H. W. Tyndall, esq.; Azalia Phœnicia, J. Mason, esq.; Amaryllis Formosissima, ditto; Rose Odorata, J. Upfill, esq.; Camellia Colvillii, Mr. J. Moore.

## *March* 17. Bath Royal United Horticultural Society.

The second show for the season of this Society took place on Thursday, in the Horticultural Gardens, Victoria Park.

*Florists Flowers and Cut Flowers.*

Class I. Nurserymen.—Tulips, best stand of 9, different names..1. Mr. Sealey, Bristol, for Triumph Royal, Pearson's Helen, Cardinal, Surpasse Catafalque, Polyphemus, Washington, Triomphe de Lisle, Holmes's King, and Lansdowne; 2. Mr. Cole, Wellow.

Anemones, no names.

Pansies, 24 varieties..1. Mr. Maule, Stapleton Nursery, Bristol, for Queen of England, Admiral Dixon, Princess Royal, Victory, Rolunda Flora, Curion, Jehu, Eclipse, Pearl, True Blue, Earl Fitzhardinge, Bathonia, Laura, Wild Dutchman, Prince of Wales, Kate, Superb, Prince Albert, Earl of Clarendon, Peter Dick, Robin Adair, Miss Stainforth, Midas, Grand Duke of Russia, and Desirable; 2. Messrs. Garraway, Mayes, and Co., Durdham-down Nursery, Bristol, for Allan's No. 2, Carpenter's Princess Royal, Lady Fuller, Garraway's Claudina, Imogene, Cormack's Beauty of the Village, Hurd's Defiance, Robin Adair, Brown's Curion, Allan's Invincible, Thomson's Grand Duke, Garraway's Constantia, Garraway's Seedling, Kitley's Bathonia, Village Maid, Admiral Dixon, Desirable, Cormack's Yellow Seedling, Captivation, Yeele's Trivonia, Marchman's Rival Yellow, Debra, Mariner, and Garraway's Seedling; Seedling not deserving.

Ornamental Basket of Cut Flowers..Mr. Carpenter, Weston-lane.—Censors, Messrs. Metyard, Yeeles, and Fisher.

Class II. Amateurs.—Tulips, best single bloom..R. Godfrey, esq., for Rose Manon. Best collection of six blooms, 1. Mr. Miles, Hilperton, for Cornwallis, Ambassadeur d'Hollande, Miles's No. 1. Tam O'Shanter, Holmes's King, and Platoff; 2. R. Godfrey, esq., for Vandyke, Roi de Siam, Triumph Royal, Platoff, Heroine, and Aglaia.

Anemones, no names.

Pansies, best collection, 18 varieties..1. J. M. Yeeles, esq., for Eclipse, Miss Stainforth, Wonder, Trivarno, Cream, Newbitonia, Carpenter's Princess Royal, Wharton's Queen of England, Victory, Launcelot, Delicata, Maid of Honour, Robin Adair, Rival Yellow, Duchess of Richmond, Paris, Earl of Clarendon, and Duke of Wellington; 2. Mr. Salter, Iford, for Princess Royal, Duke of Wellington, Victory, Trivarno, Grand Duke of Russia, Curion, Earl of Clarendon, Prince of Waterloo, Grand Duke, Captivation, Cream, Bathonia, Launcelot, Queen of England, Duchess of Kent, Beauty of the Village, Eclipse, and Betty Twiford, 12 varieties, 1. Mr. G. Fisher, Limpley Stoke, for Marchman's Rival Yellow, Cooke's Triumphant, Yeele's Trivonia, Victory, Duke of Beaufort, Launcelot, Beauty of Hitchin, Duchess of Richmond, Mrs. Hooper, Lord's Queen, Victory, and Carpenter's Princess Royal; 2. Rev. J. Bond.

Seedling..Miss Bayley, for Pond's Hero of Somerset.

Brompton Stocks,..3 Red..T. Emerson, esq. 3 White, Mr. Lidiard.—Censors, Messrs. Sealey, Gale, and Hogg.

*Flowering Plants in Pots.*

Class I. Nurserymen..Greenhouse Plants, best collection of 9: 1. Messrs. Salter and Wheeler, for Kennedia dilatata, Epacris pulchella, Azalea Indica alba, Epacris, grandiflora, Correæ elegans, Acacia armata, Fuchsia corymbiflora, Fuchsia globosa, and one other; 2. Messrs. Garraway, Mayes, and Co., for Chorizema Henchmanii, Pimelea hispida, Pimelea Mayesiana, Hibbertia Cunninghamii, Lechenaultia formosa, Statice puberula, Azalea rubra pleno, Azalea spectabile, and Petunia rosea alba.

Cape Ericas, best collection of 6..Messrs. Garraway, Mayes, and Co., for Hybrida Vestita incarnata, Mundula, Odorata, Fastigiata lutea, and Beaumontia.

Geraniums, best collection of 12, different names..1. Mr. Carpenter, for Gaine's King, Matilda, Jewess, Joan of Arc, Grand Duke, Sylph, Roseum elegans, Amethyst, Victory, Alexandrina, Gipsey, and Rambler; 2. Messrs. Salter and Wheeler, for Maid of Athens, Rival King, Juba, Roseum elegans, Seedling, Clarissa, Viola, Lord Bexley, Seedling, Mabel, and two others.

Calceolarias, shrubby, 8 different varieties..1. Messrs. Salter and Wheeler, for Rubra, Elegans, Fulgida, Sarah, Prince Albert, Mrs. General Andrews, Bronze, Viscosa superba. Herbaceous, Messrs. Salter and Wheeler, for Bicolor, Rotunda, Princess Royal, Rubra, Salterii, Splendens, Purpurea perfecta, and Mayor of Bath.

Hardy Plants, best collection of 8 varieties..Messrs. Salter, and Wheeler, for Lupinus polyphyllus, Pæonia moutan, Aquilegia Canadensis, Azalea pontica, Sedum palustris, Four-season Rose (Rose Marshal Villers), and Globularia spicus.

American Plants, best 4..Messrs. Salter and Wheeler, for Rhododendron ponticum, Rhododendron maximum roseum, Azalea bicolor, Azalea pontica.

Fuchsias, best collection, 3 varieties..Messrs. Garraway, Mayes, and Co., for Pendula, Terminalis, Insignis, and Fulgens.

Censors, Messrs. Hardy, Saul, and Hatch.

Class II. Amateurs..Orchideous, best collection of 3..1 and 2. J. Jarrett, esq., Camerton-court, for Epidendrium sp. Demerara, Epidendrum machrochilum, Oncidium stramineum. Single specimen, J. Jarrett, esq., for Saccolabium guttatum.

Stove Plants, best collection of 5..J. Jarrett, esq., Calantha veratrifolia, Ixora grandiflora, Tabernæmontana coronaria, Lasiandra petiolatia, Stephinotus floribundus. Single specimen 1, J. Jarrett, esq., for Oncidium pictum; 2. Miss Bayly, Devonshire-cottage, for Gesneria lateritia.

Greenhouse Plants, best collection of 6.—1. J. M. Yeeles, esq., for Chorizema Henchmanii, Pimelea hispida, Correa speciosa major, Kennedia monophylla, Pimelea decussata, and Erica hybrida; 2. Mrs Bayly, for Tropæolum tricolorum, Abutilon striatum, Fuchsia Youellii, Calceolaria splendens, Correa speciosa major, Chorizema variens. Best collection of 4..J. Jarrett, esq, for Lechenaultia biloba, Eriostemon buxifolium, Kennedia inophylla, Elichrysum carnea. Single specimen, 1. J. M. Yeeles, esq., for Statice arborea; 2. J. Jarrett, esq., for Fuchsia fulgens.

Cape Ericas, best collection of 4 different varieties..1. J. M. Yeeles, esq., for Hybrida, Boweana, Perspicua nana, Vestita coccinea; 2. G. C. Tugwell, esq. Single specimen, J. M. Yeeles, esq., for Vestita alba.

Geraniums, Light..1. G. C. Tugwell, Esq.; 2. W. Blair, esq. Rose, 1. Dr. Kay, Clifton; 2. G. C. Tugwell, esq. Red..1. Dr. Kay; 2. J. M. Yeeles, esq. Dark or Mottled, Dr. Kay. Best collection of 12..1. No names; 2. J. Jarrett, esq., for Grand Duke, Jehu, Chef-d'œuvre, Garth's Perfection, Alexandrina, Coronation, Rienzi, Florence, Clarissa, Arabella, and 2 others.

Calceolarias, shrubby, best collection of 6..J. M. Yeeles, esq., for Mrs. Kemble, Lady of the Lake, Magniflora grandiflora, Splendissima, Pilot, Towardii coccinea. Herbaceous, J. M. Yeeles, esq., for Adonis, Queen Dowager, Victoria, Prince Albert, Conqueror of Europe, Criterion.

Hardy Plants, best 4..J. Jarret, esq., for Clematis bicolor, Nemophylla hybrida, Iberis sempervirens, Alyssum sexatile.

Mr. Shaw's Prizes..Geraniums, 12 of different names..1. Mr. Lucas, gardener to Mr. Shaw, for Roseum elegans, Gaines's King, Clarissa, Jehu, Sylph, Dennis's Perfection, Bridegroom, Una, Priory Queen, Jewess, Sultan, and Alicia; 2. J. M. Yeeles, esq., for Sultan, Roseum elegans, Sylph, Magna Charta, Mabel, Alicia, Joan of Arc, Conservative, Florence, Nymph, Coronation, and Victory.—Censors, Messrs. Garraway, Maule, and Simpson.

Plate Prize..Geraniums, 6 blooms..1. Miss Bayly, for Polyphemus, Heroine, Holmes's King, Richard III., Captain White, and Ophir; 2. Mr. Lockstone, Malmesbury, for Polyphemus, Lady Collingwood, Triomphe, Royale, Claudiana, Holmes's King, and Well's Addison.

Extra Prizes..Basket of Plants..Mr. Shaw, for Calceolaria splendidum, Calceolaria harlequin, Calceolaria formosa, 5 Amaryllis Ackermanii, 5 Amaryllis splendens, Erica translucens, Erica ceranthoides, Erica vestata rosea, Erica conspicua nana, Polygala cordifolia, Salvia heterophylla, Ageratum grandiflora, Henchmanii varium nana, Sparaxis tricolor, Ixia crateroidis, Democarpus septa, Erinus fragrans, Una, Joan of Arc, Gaines's King, Jehu, Jewess, Dennis's Perfection, Conservative, and Ardens.

Fuchsias..Mr. Shaw, for Fuchsia globosa major (7 feet) high, with more than 500 blooms in flower), F. globosa major, 2 fine F. globosa, F. Victoria, F. formosa elegans, F. fulgens, F prostrata formosa, F. corymbiflora, and F. Thomsonii.

*May* 18. CAMBRIDGE. The Horticultural Society held their second exhibition at the Town Hall. The following are the prizes awarded. Plants and flowers.

Tulips, 2 of each class..Medal, Sanjio, Royal Sovereign, Catalini, Lavinia, Superb en Noir, Unknown, Mr. Headly; 2. (classed *ad meritum*), ditto; 3. Ambassadeur d'Hollande, Polyphemus, Platoff, Rubens, Rosa Blanca, Princess Victoria, Mr. Twitchett; 4. Platoff, Polyphemus, Rose Quarto, Violet, Ambassadeur d'Hollande, Triomphe Royale, Mr. Haylock.

Geraniums, best 6..Alicia, Annette, Coronation, Effulgens, Priory Queen, Victory, Mr. Widnall; 2. Joan of Arc, Lownde's Perfection, Alicia, Dennis's Perfection, Splendissima, Messrs. Hudson. Amateurs, best 6: Same as above; 2. Flask, Perfection, Joan d'Arc, Victory, Alicia superb, Chef-d'Œuvre, Mr. Batson.

Calceolarias, best 6..Widnall's Meteor, Lady of the Lake, and 4 seedlings, Mr. Widnall.

Pansies, 24..Prince Albert, King's Champion, Widnall's Crocus, Eliza, Conservative, Jupiter, Mirror, Nestor, Verus, Laura, Bridge's Lady Peel, Goldilocks, and 12 seedlings not named, Mr. Widnall.

Specimen Plant..1. Hydrange hortensis, Mr. Green; 2. Tropeolum tricolorum, Mr. Widnall. Amateurs only: Hoya carnosa, Messrs. Hudson..Extra, Epacris grandiflora, Mr. Gimson. By Mr. R. Headly, for collection of pansies: Mr. Widnall, for Crocus, Angelica, Eliza, Helen, Mirror, Jesse, Princess Royal, Jewess, Prince Albert, Mogul, Champion, Miss Repton, Beauty of Enty Hill, and seedlings.

*May* 18. MIDLAND COUNTIES. The exhibition of Tulips took place at the White Swan Inn, Nottingham. The flowers were exceedingly well grown, and afforded much gratification to the visitors.

Messrs. Spencer, Harpham, and Gibbons were successful with some superb seedling tulips, which bid fair to eclipse many of the older varieties.

The following is a statement of the winning sorts:

First Class—Feathered Bizarres.

Premier, Royal Sovereign, Maltby.
1. Magnum Bonum, Spencer
2. Royal Sovereign, Maltby.
3. Duc de Savoy, ditto.
4. Seedling, Harpham.
5. Seedling, Harpham.
6. Charles X., Wood.
7. Palafox, Spencer.
8. Seedling, ditto.
9. Trafalgar, J. Gibbons.

Second Class—Flamed Bizarres.

Premier, Captain White, Spencer.
1. Lord Milton, Maltby.
2. Earl St. Vincent, Spencer.
3. Catafalque, Maltby.
4. Earl of Warwick, ditto.
5. Invincible, Wood.
6. Royal Sovereign, Maltby.
7. Gabel's King, Spencer.
8. Charbonnier, ditto.
9. Albion, Maltby.

Third Class—Feathered Byblœmens.

Premier, Seedling, Spencer.
1. Archbishop of York, ditto.
2. Lillard, ditto.
3. Seedling, Harpham.
4. Ditto ditto.
5. Black Baquet, Spencer.
6. Irene, Wood.
7. Seedling, J. Gibbons.
8. Ditto ditto.
9. Ditto ditto.

Fourth Class—Flamed Byblœmens.

Premier, Incomparable le Grand, Maltby.
1. Sable Rex, Harpham.
2. Queen Charlotte, ditto.
3. Cremoise la fidelle, Wood.
4. Bacchus, ditto.
5. Violet Surpassant, Harpham.
6. Incomparable le Grand, Maltby.
7. Ambassadeur d' Holland, ditto.
8. Seedling, J. Gibbons.
9. Princess, ditto.

Fifth Class—Feathered Roses.

Premier, Queen Boadicea, Harpham.
1. Comte de Vergennes, Spencer.
2. Triomphe Royal, Maltby.
3. Lady Crewe, ditto.
4. Lady Middleton, Spencer.
5. Claudiana, Wood.
6. Heroine, ditto.
7. Unknown, ditto.
8. Dolittle, ditto.
9. S. Polyphemus, ditto.

Sixth Class—Flamed Roses.

Premier, Guerriea, Maltby.
1. Unique, Harpham.
2. Turner's Lord Hill, Wood.
3. Flambeau de la Duchesse, Harpham.
4. Seedling, J. Gibbons.
5. Lady Wilmot, Spencer.
6. Matilda, Wood.
7. Unknown, Spencer.
8. Triomphe Royal, Maltby.
9. Aglaia, Wood.

Seventh Class—Selfs.

Premier, Seedling, J. Gibbons.
1. Seedling, Spencer.
2. Ditto, J. Gibbons.
3. Ditto, Spencer.
4. Ditto, Gibbons.
5. Seedling, Gibbons.
6. Ditto, ditto.
7. Ditto, ditto.
8. Ditto, ditto.
9. Ditto, Maltby.

*May* 25. CUMBERLAND. The first exhibition of the Floral and Horticultural Society took place in the Coffee-house Assembly Rooms, Carlisle.

TULIPS.

1. Duke of Lancaster, Shol's Delight, Violet Wallers, Maitre Partout, Vandyke, Lady Crewe, Min d'Or, J. Carruthers, gardener to J. Dixon, Esq., Knells; 2. Trafalgar, Albion, Sable Rex, Claudius, Dolittle, Triumph Royal, Min d'Or, P. M'Intyre, gardener to P. Dixon, Esq., Warwick-bridge; 3. Sable Rex, Washington, Vulcan, Grant's Sovereign, Trafalgar, Unknown, Min d'Or, Wm. Ward, Carlisle.

1. Best Feathered Bizarre, Wm. Hogarth, gardener to Mrs. Fairbairn, Botcherby; 2. Trafalgar, P. M'Intyre.

Best Feathered Byblœmen, Washington, Wm. Ward.

Best Feathered Rose, 1, Duc de Bronti, J. Carruthers; 2. Dolittle, P. M'Intyre.

Best Flamed Bizarre, no name.

Best Flamed Byblœmen, 1. Alcibiades, J. Carruthers; 2. No name; Violet Fond Noir, Wm. Ward.

Best Flamed Rose, 1. Iphigenia, Wm. Ward; 2. No name; 3. Vulcan, P. M'Intyre.

Best Self-coloured, Min d'Or, J. Carruthers.

Best Stove Plant, in Flower, 1. No name, 2. Russellia juncea, J. Cruickshank, gardener at Lowther Castle.

Best Greenhouse Plant, ditto, 1. Azalea Indica alba, A. Mitchell; 2. Tropæolum tricolorum, J. Carruthers.

Best Hardy Herbaceous Plant, St. Bernard's Lily, C. Doig.

Best three Geraniums, 1, Sylph, Napoleon, Queen Dowager, J. Cruickshank; 2. Dennis's Perfection, Vandyke, Sylph, J. Buchanan; 3. Una, Vivid, Joan of Arc, J. Carruthers.

Best three Fuchsias, 1. Fulgens, Globosa, Youellii, John Peel; 2. Standishii, Globosa, Erecta tricolor, J. Carruthers.

Best three Ericas, Hybrida, Linneæ, Linneæ nivea, J. Cruickshank.

Best three Epacris, 1. Campanulata rubra, Grandiflora, Pulchella, J. Cruickshank; 2. Grandiflora, Attenuata, Pulchella, J. Peel.

Best three Calceolarias, Youngsonia, Lady Douglas, Mogul, J. Peel.

Best three Petunias, Superb, Masterpiece, Rosea Superb, J. Cruickshank.

Best 12 Pansies, 1. Not named; 2. Ditto; Page's Masterpiece, Widnall's Hero, Widnall's Belzoni, Louisa, Bruceana, Cook's Jehu, Charlie, Thompson's Victoria, Pamona superba, Victory, Defiance, Seedling, P. M'Intyre.

Best 12 Specimen Plants, 1. Templetonia glauca, Boronia serrulata, Pimelea decussata, Geranium Climax, G. Perfection, Erica perspicua, E. pregnans, Serissa flore pleno, Calceolaria, Verbena Tweediana, grandiflora, and Fabiana imbricata, J. Cruickshank; 2. Clianthus puniceus, two Amaryllis, Lobelia, Polygala oppositifolia, Fabiana imbricata, two Cacti, Azalea Indica alba, Petunia, Gesneria Cooperii, J. Buchanan; 3. Pimelea decussata, Fuchsia globosa minor, Balsam, Calceolaria, Fuchsia longiflora, Petunia Tri-

umphant, Cactus, Spartium linifolia, Bowera rubicunda, Spanish Broom, and Azalea Indica alba, A. Mitchell; Gloxinia alba, Gloxinia rubra, Chinese Rose, two Cacti, Calceolaria, Euphorbia splendens, Clematis, Sieboldii, Verbena Neillii, Amaryllis, Petunia, J. Carruthers.

*April* 28. WARWICK. The first exhibition of the Horticultural Society for the season was held at the Court-house. The following prizes were awarded.

Greenhouse Plants, 6..Amateurs. Tropæolum tricolor, T. pentaphyllum, Lechenaultia formosa, Erica vestita alba, E. hybrida, E. acuminata, H. C. Wise, esq. Ditto, Nurserymen: Fuchsia corymbiflora, Azalea Indica hybrida, A. Phœnicia, Cineraria, King, Erica vernix, Mr. Barnes. Ditto, 3 Amateurs: Amaryllis Johnsonia, Ixia tricolor, Kennedia nigricans, T. C. Warde, esq. Ditto, Nurserymen: Tropæolum tricolorum grandiflorum, Azalea Indica alba, A. Smithii, Mr. Barnes. Ditto, Specimen, Amateurs: Azalea Indica alba, R. Jones, esq.

Geraniums..12 Nurserymen: Beauty of Ware, Mrs. Sweet, Fosterii Roseum, Ada, Lord Hill, Joan of Arc, Siddonii, Gem, Fanny Garth, Jewess, Roslanum, La Belle, Brunette, Mr. Barnes

Pansies, 36 Blooms..May's Plenipo, Model of Perfection, Carlo Dolce, Victory, Diogenes, Edgbaston Hero, Reliance, Princess Augusta, Peter Dick, Black Knight, Imogene, Lady Sarah Ingestre, Crimson Shakspeare, Dr. Johnson, Prince of Wales, Manlius Bathonia, Childe Harold, Jewess, Lady Flora Hastings, Vivid, Launcelot, Jehu, Queen of Scots, Maid of Loire, Angeline, Coronation, Marc Antony, Bebronii, Lilac Perfection, Sovereign, Miss Hoare, Mountjoy's Victoria, Rev. J. Stainforth, Marchioness of Bath, Prince Albert, Mr. Burbury. Seedling, Mr. Cattell.

Auriculas..Amateurs. 6: Wood's Lord Lascelles, Pearson's Badajos, Hugh's Pillar of Beauty, Taylor's Incomparable, Lee's Bright Venus, Popplewell's Conqueror, J. Twamley, esq. Ditto, Nurserymen: Lancashire Hero, Duchess of Oldenburgh, Emperor Alexander, Page's Champion, Bright Phœbus, Smith's Waterloo, Mr. C. Kimberley. Ditto, 3 Amateurs: Thorneycroft's Invincible, Wood's Lord Lascelles, Popplewell's Conqueror, J. Twamley, esq. Ditto, Nurserymen: Hedge's Britannia, Warris's Blucher, Duchess of Oldenburgh, Mr. C. Kimberley.

Stove Plants..Euphorbia jacquiniflora, Eranthemum bicolor, Vinca rosea, W. H. Bracebridge, esq. Ditto, single specimen, Euphorbia splendens, C. Ward, esq.

Extra Prizes..Calceolarias seedlings, 12, H. C. Wise, esq.; Citrons in pots, 3, C. T. Warde, esq.; Provence Roses in pots, 3, W. H. Bracebridge, esq.

*May* 19. GRANTHAM. This exhibition took place at the Guildhall. The following is a statement of the winning sorts:

Best Pan of six Tulips, Mr. Sharman, of Lyston..Lord Hill, Dolittle, May Queen, Eveline, Captain White, and Joan d'Arc.

Second Pan, Mr. Buckwell, Belvoir..Rosa Perfecta, Supreme, Unknown, Maitre Partout, Captain White, Magnum Bonum.

Third Pan, Mr. Banton, Teigh..Lord Hill, Dolittle, Grace Darling (Seedling), Gay Stella, Rhoderic Dhu (Seedling), and Royal Sovereign.

Fourth Pan, Mr. Whittaker, of Knipton..Lord Hill, Duc de Bronte, Wurtemburg, William IV., Britannia, and Firebrand.

Feathered Byblœmens.

1. Lillard, Mr. Ashwell.
2. Incomparable, Banton.
3. Black Bouquet, Yeomans.
4. Lillard, Ashwell.
5. Incomparable, Banton.
6. Vandyke, Buckwell.

Flamed Byblœmens.

1. Violet Alexander, Mr. Yeomans.
2. Ditto, ditto.
3. Calypso, Sharman.
4. Lillard, Banton.
5. Black Bouquet, Sharman.
6. Roi de Siam, Yeomans.

Feathered Roses.

1. Hero of the hill, Mr. Yeomans.
2. Ditto, ditto.
3. Vesta, Banton.
4. Dolittle, Burbidge.
5. Lady Crewe, Banton.
6. Queen Boadicea, Yeomans.

Flamed Roses.

1. Triomphe Royal, Yeomans.
2. Lord Hill, ditto.
3. Vesta, ditto.
4. French Rose, Banton.
5. Lord Hill, Yeomans.
6. Vesta, ditto.

Feathered Bizarres.

1. ———, Mr. Banton.
2. Grand Duke, Sharman.
3. Magnum Bonum, Yeomans.
4. Unknown, Yeomans.
5. Joan d'Arc, Banton.
6. Mantsolier, ditto.

Flamed Bizarres.

1. Captain White, Buckwell.
2. Lord Nelson, Yeomans.
3. Emperor, Sharman.
4. Old Dutch Catafalque, Yeomans.
5. Grande Magnifique, ditto.
6. Polyphemus, Whittaker.

*May* 18. CHILWELL AND BEESTON. This exhibition took place at Chilwell, and the following is a list of the prize Tulips:

First Pan, Mr. Wilmot..For Passe Perfecta (Davy), Captain White, Lillard, Ma Chere Amie, Lady Middleton, and Flambeaux de la Duchess.

Second Pan, Mr. J. Oldham..For Magnum Bonum, Captain White, Lillard, Incomparable le Grande, Walworth, and Lady Wilmot.

*May* 25. NOTTINGHAM. The first exhibition of the above Society for this season, took place at the Assembly Rooms, for the exhibition of Tulips, Geraniums, stove, green-house, and herbaceous Plants, Ericas and hardy Shrubs, and specimens of all Fruit and Vegetables.

This being the time at which that most beautiful flower, the Tulip is in bloom, considerable efforts were made by the competitors to render the exhibition in this department as attractive as possible; and we have great pleasure in stating, that their efforts were perfectly successful.

TULIPS.

1st Pan, Mr. Gascoigne...Platoff, Abercrombie, Lilliard, Beinfeit, Triomphe Royale, Unique.

2d Pan, Mr. Samuel Bean...Royal Sovereign, Captain White, Baquet, Incomparable, Walworth, Prince d'Austuras.

3d Pan, Mr. Gillson...Platoff, Page's George the Fourth, Lilliard, Incomparable, Triomphe Royale, Flambeau de la Duchess.

4th Pan, Mr. Spencer...Platoff, Captain White, Seedling. Queen, Walworth, Triomphe Royale.

5th Pan, Mr. Harpham...Seedling, Albion—Seedling, Incomparable, Unique, Seedling.

6th Pan, Mr. Beardsley..Surpass Catafalque, Captain White, Baquet, Sable Rex, Triomphe Royale, Unique.

The best collection, Mr. Gascoigne.

1. Feathered Bizarre, Savornoy, Mr. Gascoigne.
2. ditto ditto, Seedling, Mr. Harpham.
1. Feathered Byblœmens, Black Baquet, Mr. Gascoigne.
2. ditto ditto, Seedling, Mr. S. Bean.
1 Feathered Rose, Triomphe Royale, Mr. Gascoigne.
2. ditto ditto, Walworth, Mr. S. Bean.
1. Flamed Bizarre, Captain White, Mr. Gascoigne.
2. ditto ditto, Albion, Mr. Harpham.
1. Flamed Byblœmens, Violet, Mr. Gascoigne.
2. ditto ditto, ditto, Mr. Gascoigne.
1. Flamed Rose, Triomphe Royale, Mr. Gascoigne.
2. ditto ditto, Unique, Mr. Gascoigne.
1. Self, Louis XVI, Mr. Gascoigne.

The best Seedling, Mr. Harpham. The best collection of Roses, Mr. J. Pearson. Ditto, Cut Thorns, Mr. Frettingham. Second ditto, Mr. J. Pearson.

The dealer's best twenty varieties of Pansies: Mr. Frettingham—Seedling, Beauty, Mrs. Walker, Defiance, Dr. Johnson, Argo, Scipio, Lady of the Lake, British Queen, Seedling, Village Maid, Seedling, Hope, Criterion, and six Seedlings.

The best amateur's twenty varieties of Pansies: Mr. Gillson—Mrs. Thesiger, Grand Duke of Russia, Captivation, Coronation, Mulberry, Agnes, Jewess, Imogene, Chimpanza, Climax, Rainbow, Sir G. Larpent, Magnet, Rival Yellow, Conservative, Conqueror, Queen of Scots, Queen Victoria, Melpomene, Diana.

| | | |
|---|---|---|
| Second amateur's twenty varieties of Pansies . . . | | Mr. S. Wright. |
| 1 ——— | twelve ditto . . . . . | Mr. J. Robinson. |
| 2 ——— | ditto . . . . . | Mr. J. Nevill. |

PLANTS.

The best amateur's six Geraniums..Victory, Rienzi, Clarissa, Vivid, Climax, and Sylph—W. Cartledge, Esq.

The second ditto..No names given to the Secretary—Messrs. Needham and Green.

The best dealer's six Geraniums..Climax, Victory, King, Rienzi, Joan of Arc, Clarissa, Mr. Frettingham.

The second best ditto..Climax, Victory, Seedling, Sylph, Vivid, Limatium, Mr. J. Pearson.

The best collection of Geraniums..W. Cartledge, Esq.

Best Orchideous Stove Plant..Oncidium divaricatum, G. Walker, Esq.

Second ditto ditto ditto ditto G. Walker, Esq.

Stove Plant, Euphorbia Fulgens, F. Wright, Esq.

Green-house, Erythrina cristigalli, F. Wright, Esq.

Second ditto, Clematis Sieboldii, Mr. J. Pearson.

Erica Bifolia, F. Wright, Esq.

Second ditto, Jasminifolia, F. Wright, Esq.

Herbaceous Plants, Mr. J Pearson.

Second ditto, Mr. J. Pearson.

Cactus, G. Walker, Esq.

Second ditto, G. Walker, Esq.

Best collection of Green-house Plants, Mr. J. Pearson.

Second ditto ditto ditto Mr. Frettingham.

Best collection of Ornamental Shrubs, Mr. J. Pearson.

Ditto American Plants, Mr. Frettingham.

Ditto Rhododendrons, Mr. Frettingham.

Ditto Herbaceous cut flowers, Mr. Frettingham.

Schizanthus retusus, Mr. S. Wright.

*May* 27. BOLTON. The second meeting of this Society took place on Friday, in the Temperance Hall. The Tulips were excellent in all the classes, amongst which were a Bouquet belonging to Mr. Henry Pickering, which took the first prize in its class. Mr. Thomas Walsh again brought out his fine feathered byblœmen, which he has named Favorite. Mr. Richard Dunderdale exhibited a seedling rose, broke by him, and named Princess Royal, and which was deservedly placed first in the class.

TULIPS.—Feathered Bizarres, 1. Mr. T. Walsh, for Trafalgar; 2. Ditto, for Dutch Catafalque; 3. Mr. Jas. Southern, for Alderman; 4. Mr. James Morris, for Charles X.; 5. Mr. Dunderdale, for Firebrand; 6. Ditto, for Leopoldina.

Flamed Bizarres, 1. Mr. Henry Pickering, for Incomparable Bizarre; 2. Mr. James Morris, for Liberty; 3. Mr. R. Dunderdale, for Lustre; 4. Mr. D. Rawsthorn, for Don Carlos; 5. Robert Heywood, Esq., for Black Prince; 6. Mr. James Morris, for Albion.

Feathered Byblœmen, 1. Mr. H. Pickering, for Baguet; 2. Mr. Thomas Walsh, for Seedling; 3. Ditto, for Washington; 4. Mr. R. Dunderdale, for Bien Fait; 5. Mr. James Morris, for Beauty; 6. Mr. R. Dunderdale, for Unknown.

Flamed Byblœmen, 1. Mr. Isaac Openshaw, for Magnus; 2. Mr. John Scowcroft, for Unknown; 3. Mr. James Morris, for Queen Charlotte; 4. Ditto, for Atlas; 5. Mr. Isaac Openshaw, for Incomparable; 6. Mr. Thomas Walsh, Unknown.

Feathered Roses, 1. Mr. R. Dunderdale, for Princess Royal; 2. Mr. Henry Pickering, for Lady Crewe; 3. Mr. Isaac Openshaw, for Dolittle; 4. Mr. Henry Pickering, for Hero of the Nile; 5. Mr. James Morris, for Holden's Rose; 6. Mr. Thomas Walsh for Seedling.

Flamed Roses..1. Mr. R. Mangnall, for Unique; 2. Mr. Henry Pickering, for Roi de Cerise; 3. Mr. James Morris, for Ponceau Brilliant; 4. Mr. R. Dunderdale, for Vesta; 5. Mr. James Morris, for Grand Valure: 6. Mr. Henry Pickering, for Lord Hill.

Best Bizarre Breeder, Mr. Isaac Openshaw; best Byblœmen ditto, Mr. R. Dunderdale; best Rose ditto, ditto; best Self ditto, Mr. Thomas Walsh; best Double Tulip, James Cross, esq.

Stove Plants..1. R. Heywood, esq., for Euphorbia splendens; 2. Ditto, for Dracenea purpurea; 3. Ditto, for Ardisia paniculata; 4. Ditto, for Jatropha pandurifolia; 5. C. J. Darbyshire, esq., Epidendrum cochleatum.

Greenhouse Plants..1. C. J. Darbyshire, for Pimelea decussata, 2. Robert Heywood, esq., for Epacris grandiflora; 3. Ditto, for Selago Gillisii; 4. C. J. Darbyshire, esq. for Azalea Indica alba; 5. R. Heywood, esq., for Boronea serrulata.

Ericæ..1. Mr. John Openshaw, for Ventricosa superba, 2. Mr. Davis Rawsthorn, for Vestata fulgida; 3. Mr. John Openshaw, for Propendens; 4. Mr. D. Rawsthorn, for Vestata alba; 5. Ditto, for Persoluta alba.

Geraniums..1. R. Heywood, esq., for Sylph; 2. Ditto, for Gaines's King; 3. Ditto, for Urania; 4. Ditto, for Lowndes's Perfection; 5. Ditto, for Climax.

Herbaceous Plants..1 R. Heywood, esq., for Spirea japonica; 2. Mr. D. Rawsthorn, for Cineraria Neillii; 3. Ditto, for Cineraria Imperial Blue; 4. Ditto, for Calceolaria Kentish Beauty.

Hardy Shrubs..1. Robert Heywood, esq., for Clematis azurea grandiflora; 2. Ditto, for Clematis bicolor; 3. H. and E. Ashworth, esqrs., for Solliya heterophylla; 4. Ditto, for Ledum latifolium; 5. Ditto, for Azalea ponticum.

Pansies..1. Rev. D. Hewitt, for Eclipse; 2. Mr. R. Dunderdale, for Carlo Dolce; 3. Rev. D. Hewitt, for Victory; 4. Ditto, for Buonaparte; 5. Mr. R. Dunderdale, for Belzoni; 6. Ditto, for Admiral Napier.

Best stand of 8 Cut Specimens..Mr. D. Rawsthorn; ditto of 6 ditto, Rev. D. Hewitt; ditto of 4 ditto, ditto.

*April* 19. HUNTINGDONSHIRE. The following prizes were awarded by the Horticultural Society.

Auriculas, green-edged..1. Page's Champion, Mr. Wood; 2. Not named, Mr. Giddings; 3. Warris's Blucher, Mr. Wood.

Gray-edged..1. Grime's Privateer, Mr. Franklin; 2. Not named, Mr. Rooper; 3. Ringleader, Mr. Giddings.

White-edged..1. Taylor's Glory, Mr. Wood; 2. Wild's Bright Phœbus, Mr. Barringer; 3. Taylor's Glory, ditto.

Selfs..1. Hyland's Royal Purple, Mr. Wood; 2. Netherwood's Othello, Mr. Barringer.

Seedling ditto..Gidding's Prince of Wales, Mr. Giddings.

Polyanthus..1. Buck's George IV., Mr. Franklin; 2. Collier's Princess Royal, Mr. Giddings; 3. Ditto, ditto.

Seedling..Not named, Mr. Wood.

Hyacinths, Blue..1. Buonaparte, Mr. Raye; 2. Laurens Coste, Mr. Franklin, 3. Ditto, Mr. Raye.

Red or Pink..1. Comtesse de la Coste, Mr. Barringer; 2. Rex Rubrorum, Mr. Raye; 3. Comtesse de la Coste, Mr. Giddings.

White..1. Groot Voorst, Mr. Barringer; 2. Ditto, Mr. Wood; 3. Ditto, Mr. Barringer.

Three best single, various Colours..1. Nimrod, Tubiflora, Grand Vainqueur, Mr. Raye; 2. Nimrod l'Ami du Cœur and Voltaire, ditto; 3. Brown's Jewel, Mars, Holstein; ditto.

Polyanthus Narcisaus, yellow..Soleil d'Or, Mr. Barringer.

White, Grand Monarch, Mr. Barringer.

Specimen plant..Chorizema macrophylla, G. Rush, esq.

Primroses, 3..1. Mr. Giddings; 2. Mr. Barringer.

## *May 24th.* Cheltenham Horticultural Society.

Amateurs' Prizes..Tulips, not named.—Pansies, ditto.

Stove or Greenhouse Plants..1. Clematis bicolor, Mr. W. Bryan; 2. Cactus speciosissimus, J. Webster, esq.

Geraniums, the best 6..1. Sylph, King, Coronation, Lowndes' Perfection, Joan of Arc, Jewess, J. Webster, esq.; 2. Coronation, Joan of Arc, Sylph, Conservative, Bridesmaid, Florence, Mr. Heath; 3. Hodges' Emperor, Priory Queen, Jewess, Foster's Alicia, Victory, Dennis's Perfection, Mr. W. Bryan. Geraniums, single, 1. Sylph, J. Webster, esq.; 2. Masterpiece, Mr. Heath; 3. Joan of Arc, Mr. W. Bryan.

Hardy Shrubs..Deutsia, Lady Russell.

Hardy Herbaceous Plants .Dodecatheon elegans, Mr. Heath.

Plants, collection of 6..1. Fuchsia corymbiflora, Eutaxia myrtifolia, Orange-tree, Moss Provence Rose, Victory Geranium, Correæ speciosa, Miss Tunno; 2. Cactus speciosa, Calceolaria, Schyzanthus Hookerii, Fosterii Roses Geranium, Fuchsia globosa, Diplacus puniceus, J. Webster, Esq.

Nurserymen and Commercial Gardeners. Tulips..no names. Pansies..ditto.

Plants, collection of 6..1. Statice arborea, Euphorbia splendens, Erica vestita coccinea, Erica propendens, Erica Beaumontia, Erica Humea, Mr. Hodges; 2. Fabiana imbricata, Erica intermedia, Boronia serrulata, Epacris grandiflora, Pimelea linifolia, Pimelea decussata, Mr. Pipe.

Geraniums, best 12..1. Sylph, Garth's Perfection, Grand Duke, Rienzi, Priory Queen, Joan of Arc, Alicia, Victory, Conservative, Coronation, Lifeguardsman, Jewess, Mr. Pipe; 2. Britannia, Nymph, Bridesmaid, Coronation, Lilla, Jewess, Joan of Arc, Ivanhoe, Comte de Paris, Victory, Alicia, Dulcinea, Mr. Hodges.

Geraniums, best 6..1. Consort, Lady Carlisle, Commodore, Conservative, Sylph, Coronna, Mr. Hodges; 2. Erectum, Sylph, Florence, Perfection, Victory, not known, Mr. Pipe.

Extra Prizes, Geranium..seedling, Mr. Hodges. Ditto, ditto, Mr. Pipe.

Collection of Calceolarias..Mr. Hodges. Ditto of Cinerarias..Mr. Hodges. Ditto of Ericas, Mr. Hodges. Basket of Calceolarias..Mr. Meggs.Rosa Devoniensis..Mr. Evans.

## *June 6.* Wingham Horticultural and Floral Society. The following Pelargoniums were from Mr. Miller's nursery, Ramsgate.

Nymph, Comte de Paris, Gipsey maid, Firebrand, Prince Albert, Lady Carlisle, Priory Queen and Beauty, besides a collection of cut blooms of several other sorts.

Plants in Pots..best 3 Pelargoniums, Jewess, Matilda, and Prince Albert, Rev. C. Oxenden; second ditto, Garth's Perfection, Joan of Arc, Una, Rev. C. Oxenden. Best 1 ditto, Lilia Jones, Rev. C. Oxenden. Best 3 Herbacs..Calceolaries, Mabel, Hero, Invincible, J. Godfrey, esq. Best 3 Shrubbery, ditto, Royal Standard, Chancellor, Denholmii, J. Godfrey esq. Best 3 Annuals..Phlox, Drummondii, Collinsia bicolor, Nemophila insignis, D. Denne, esq. Best 3 Cacti..3 Speciosissimi, Sir B. Bridges, bart. Best Cactus..Ackermannii, ditto, ditto. Best Bulb in flower..Ixia patens, Mrs. Hammond. Best Fuchsia..Fulgens, D. Denne, esq. Second ditto..Globosa, ditto. Best Rose..Lee's Blush perpetual, Lady Bridges. Best 6 Greenhouse Plants..Grevillia Manglesii, Pimelia Decussata, Sollya Heterophylla, Metrosideros Speciosa, Fabiana imbricata, Polygala grandiflora, J. Godfrey, esq. Best 3 ditto..Pimelia Decussata Metrosideros saligna, Cineraria formosa, R. Brook, esq. Best 1 ditto..Erica hybrida, Mrs. Dickens.

Cut Flowers..best 6 Roses, Crimson China, Queen Victoria, Princess Esterhasy, Hymenee, Yellow China, Common China, J. Godfrey, esq. Best 12 Ranunculuses.. Mrs. Hammond. Second ditto..Mr. G. Denne. 'Best 3 Red Stocks..Giant, Mrs. E. Collard. Best 3 Purple ditto..Brompton, S. M. Hilton, esq. Best 12 Heartsease..Jewess, Incomparable, Delicata, Duchess of Richmond, Haidee, Sylvia, Countess of Orkney, Jehu, Eclipse, Diogenes, Vivid, Budesman, Rev. J. G. Hodgson. Second ditto..Queen of the Isles, Pilot, Cream superb, Peter Dick, Duchess of Richmond, Unknown, White's Perfection, Marchioness of Lothian, Prince Albert, Imogene, Eclipse, Delicata, Rev. J. G. Hodgson. Best 6 Pelargoniums..Jewess, Garth's Perfection, Conservative, Colossus, Chef d'œuvre, Beauty of Ware, Rev. C. Oxenden. Best Bouquet..Lady Bridges. Best bouquet of Hardy Flowers..Mrs. Brook. Best Device, Crown..Mrs. Plumptree. Second ditto, Fountain..Captain Swan. The judges also highly commended some Gloxinias from J. P. Plumptree, esq., M.P.

The Heaths from Master's Exotic Nursery..Cauteri, Ambigua, Fulgida nana, Persoluta, Odora rosea, Vesti, were very beautiful; and a fine stand of named double Anemone.

*May 18th.* GLASGOW. The Spring Meeting of the Horticultural Society took place in the Trades' Hall. On the whole, the display was what may be considered a good one, from the immense variety of flowers composing the numerous bouquets, bearing out the fact, that the season is fully three weeks in advance of an ordinary one.—Laburnum, Lilac, Tulips, and Broom being in great profusion. Prizes awarded.

Pelargoniums..1. Mr. William Paton, gardener to William Gilmour, esq., of Maryland, for Lady Nithsdale, Sylph, Alexandrina, and Vandyke; 2. Mr. John Middleton, gardener to Archibald Campbell, esq., of Blythswood, for Joan of Arc, Alexandrina, Beauty of Ware, and Ridum.

Calceolarias..1. Mr. Andrew Turnbull, gardener to Lord Douglas, at Bothwell Castle, for Kentish Beauty, Juba, Unique, and Eva; 2. Mr. William M'Diarmid, gardener to James Hunter, esq., of Hafton.

Verbenas..1. Mr. Charles Ross, gardener to Miss Buchanan, Woodlands, for Tweediana grandiflora, Arraniana major, Melindres latifolia, and Hendersonia; 2. Mr. James Borthwick, gardener to Arch. Bogle, esq., Gilmour hill, for Hendersonia, Melindres, Neilii, and another.

Bouquets..1. Mr. William M'Diarmid, Hafton, for Clianthus puniceus, from the open border, Solanum crispum, Cytisus purpurea, Phlox procumbens, P. verna, Cardamine pratense, Aquilegia Canadensis, Ledum thymifolium, Daphne cneorum, Azalea, several species, Clematis azurea grandiflora, Pæonia moutan, Anemone pulsatilla, Alyssum saxatile, Solidago, sp., Rosa sinensis, double and single Wallflower, double and single Stock, Jonquils, &c.; 2. Mr. James Talt, gardener to Wm. Cuoper, Esq., Woodstone, by Row, for Clianthus puniceus, from the open border, four years exposed, Lupinus polyphyllus, L. Cruikshankii, single and double Wall-flower, single and double Stock, white, red, and purple, Aquilegia, Gentiana, Valeriana, Trollius, Geraniums, &c. &c., of sorts.

Judges, Messrs. Robert Ingram, R. Middlemas, and R. Harold.

Greenhouse Plants..1. Mr. Andrew Turnbull, Bothwell Castle, for Epacris pulchella, Tropæolum tricolorum, spheroidally trained, Erica linnæoides; 2. Mr. R. Guthrie, gardener to Sir A. Campbell, Bart., for Azalea sinensis, Erythrina cristagalli, Hovea celsi, and Fuchsia fulgens.

Rhodoraceæ, 1. No names; 2. Mr. Wm. M'Diarmid, Hafton, for Rhododendron ponticum album, Daphneoides, Conspicua, and Seedling, Azalea pontica pallida, Glauca, Tricolor, Ronaldsii, Rubra, Aurea, Virgata, Fastigiata, and Ignescens, Ledum thymifolium and buxifolium, Kalmia glauca and rosea.

Extra Plants, 1. Mr. Andrew Turnbull, Bothwell Castle, for Oncidium flexuosum and Calanthe veratrifolia; 2. Mr. A. Turnbull, Bothwell Castle, for Erica florida, var. Campanulata, E. perspicua, var. rosea, E. perspicua, var. alba nana; 3. Mr. A. Turnbull; Bothwell Castle, for Clematis Sieboldii, Pentstemon cobæa, and Statice arborea.

Judges, Professor J. H. Balfour, Messrs. W. Gourlie, jun., and Stewart Murray.

Seedling Pansies, 1. Mr. Wm. Paton, Maryland; 2. Mr. James Bulloch, gardener to Mrs. Crooks, Leven Castle. Named Pansies, 1. Mr. James Bulloch, Leven Castle, for Duke of Douglas, Turnbull's Attraction, Talleyrand, Olympias, Juliana, Amato, Livy, Shakspeare, Gem, Thyne's Rotunda superba, Howard, Sir Walter Scott, Queen, Thomson's Princess Royal, Dean Swift, Criterion, Imogene, Carlo Dolce, Hecate, Admiral, Romeo, Edina; 2. Mr. Wm. M'Diarmid, Hafton, for Queen Victoria, Widnall's Prince Albert, Lady Douglas, Juliana, Priam, Defiance, Hewit's Queen of England, Lord Douglas, Good Sir James, Queen Victoria, Thomson's Carlo Dolce, Marquis of Lorn, Lavinia, Dorcas, and Seedlings; 3. Mr. James Borthwick, Gilmour-hill, for Archduke, Widnall's Beauty and Gem, Thyne's Gem, Widnall's Ivanhoe, Widnall's Jupiter, Lepruck, Mirror, Queen Bess, Maid of the Mill, The Doctor, Rival Doctor, Masterpiece, Rienzi, Amelia, Angelina, Beauty (Brown's).

Judges, Rev. R. O. Bromfield, Messrs. Wm. Campbell, Alex. Taylor, James Robertson.

*April* 27. DUNDEE. The first meeting of the Dundee Floral and Horticultural Society for the season took place in the Caledonian Hall, the Auriculas and Pansies were acknowledged by all to be the best ever shown by this Society. Prizes awarded:

Auriculas, best 3 green-edged..A. Easson, esq., for Oliver's Lovely Ann, Taylor's Ploughboy, and Smith's Waterloo; 2. C. Clark, Esq., for Booth's Freedom, Lowe's Grace Darling, and Laurie's Glory of Cheshunt.

Best 3 gray-edged..1. C. Clark, esq., for Waterhouse's Conqueror, Smith's General Bolivar, and Smith's Diadem.

Best 3 white-edged..1. Mr. J. Wanlass, for Smith's Mrs. Sim, Campbell's Robert Burns, and Lee's Bright Venus; 2. A. Easson, esq., for Wood's Delight, Taylor's Incomparable, and Compton's Colonel Gardiner.

Best 6..1. J. Jamison, esq., for Lee's Venus, Taylor's Ploughboy, Oliver's Lovely Ann, Booth's Freedom, Taylor's Glory, and Henchelough's Lily of the Valley; 2. C. Clark, esq., for Barlow's King, Howard's Lord Nelson, Grime's Privateer, Waterhouse's Conqueror, Thompson's Bang Up, and Taylor's Ploughboy.

Best 3 Selfs..A. Easson, esq., for Netherwood's Othello, Hufton's Squire Munday, and Redman's Metropolitan; 2. J. Jamison, esq., for Hufton's Squire Munday, and 2 Seedlings.

Best Alpine..C. Clark, esq., for Martin's Mayfield.

Best Seedling Self..1. C. Clark, esq.; 2. Mr. J. Tait.

Best gray-edged Seedling..1. Mr. J. Tait; 2. D. Martin, esq., of Rose Angle.

Polyanthuses, best 3..1. Mr. J. Wanlass, for Backhouse's Bonny Bess, Pearson's Alexander, and Brook's Duke of York; 2. C. Clark, esq., for Gold Lace, Pearson's Alexander, and Buck's George the Fourth.

Best 6..Mr. J. Wanlass, for Park's Lord Nelson, Backhouse's Bonny Bess, Brook's Duke of York, Fillingham's Tantara, Pearson's Alexander, and Archley's Black and Gold. 2. C. Clark, esq., for Clark's Scaleshill Beauty, Hobkin's Victorious, Cox's Prince Regent, Brown's Seedling, Tim's Defiance, and Queen Bess.

Best Seedling..Mr. J. Tait.

Heartsease, best 6..Mr. S. Thompson, for Prince Albert, Thompson's Eclipse, Niven's Kerriana, Julia, Lane's Juliet, and Sylph; 2. Mr. G. Simpson, for Lady Flora Hastings, Lady Fuller, Ealing Hero, Chimpanzee, Ne plus ultra, and Lord Douglas.

Best 12..D. Miln, esq., for Lady Flora Hastings, Lady Fuller, Amanda, Amato, Tippoo Saib, Verdict, Shakspeare, Beauty of Edmonton, Belsoni, Mulberry, and 3 Seedlings; 2. S. Thompson, esq., for Imogene, Eliza, Julia, Thompson's Duke of Wellington, Edmonton Hero, Defiance, Atlas, John Frost, Kerriana, Eva, Amanda, and Brahmin.

Best Seedling..1. D. Miln, esq.; 2. C. Cuthrie, esq.

Greenhouse Plants, best 6..A. Easson, esq., for Correa speciosa, Erica linneoides, Hovea celsi, Azalea indica alba, Zychia coccinea, and Cineraria bicolor; C. Clark, esq., for Acacia Armata, Pimelia decussata, Erica venustum, E. Willmeriana, Cineraria Waterhousiana, and Pulchella. An extra prise was awarded to G. H. Newall, esq., for Lechenaultia formosa, Correa speciosa, and Pulchella; Erica Willmeriana, Cystisus racemosus, and Acacia armata.

Heaths, best Pair..1. C. Clark, esq., for Cerinthioides, and Persoluta coccinea; 2. G. H. Newall, esq., for Regerminans, and Colorens superba.

Best Greenhouse Climber..1. A. Easson, esq., for Clematis azurea grandiflora; 2. Dr. Newall, for Kennedia prostrata.

Best Stove Climber..C. Clark, esq., for Hoya carnosa.

Best Pair of Stove Plants..Mr. D. Wallace, for Epiphyllum Jenkinsonia, and Cereus flagelliformis.

Best Specimen Plant for beauty..1. J. Hampton, esq., for Clianthus puniceus; 2. C. Clark, esq., for Epiphyllum Jenkinsonia.

Ditto for rarity..A. Easson, esq., for Pimelea nivea.

Best 8 Herbaceous Blooms..Mr. J. Tait, for Calthea palustris, Ranunculus amplexicaulis, Phlox subulata, Trollius Asiatica, Grobus verna, Saxifraga crassifolia, Farcesia deltoides, and Aquilegia canadensis; 2. Mr. J. Dick, for Ranunculus amplexicaulis, Saxifraga crassifolia and cordifolia, Phlox subulata, Furmaria solida, Trollius Asiatica, Velhemia media, and Doronicum luteum.

Best Bouquet..Mr. J. Tait.

The Auricula Sweepstakes was awarded to Alexander Easson, esq., for Kenyon's Ringleader, Howard's Lord Nelson, and Taylor's Glory.






1. GLADIOLUS ATROROSEUS — 2. GLADIOLUS PATENS.

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# FLORIST'S JOURNAL.

AUGUST 1, 1842.

## THE GLADIOLUS,

WITH AN ENGRAVING OF G. ATROROSEUS AND G. PATENS.

THIS lovely genus is fast advancing to a very high station among florist's flowers, and a very natural and highly ornamental addition it is to the group of plants so denominated. The selection of this genus for improvement by means of cross-impregnation reflects great credit on the cultivators of it, as it exhibits a thorough knowledge of the physiological characters of the genus, and a sound judgment in the choice of individual species selected from such improvement. The Gladiolus forms part of the natural order Irideæ—an order composed of plants possessing the greatest claims on our notice, from their extreme beauty and the great ease with which, for the most part, they are cultivated. This order is distributed throughout America, Europe, and the southern parts of Africa: the Gladiolus is found in greatest abundance in the neighbourhood of the Cape of Good Hope, where, blooming among antholyzas, sparaxis, and a thousand other plants of the same beautiful order, it imparts to the herbage of those places that indescribable charm which has enchanted all observers. Our first importation from thence was about the year 1745, though G. communis and byzantinus were known to us at a much earlier period. Since that time our collections have been enriched a thousand fold by the zealous exertions of collectors abroad and the spirited and well-directed efforts of cultivators and patrons at home. Among the most assiduous cultivators of this and almost every other

genus we cannot refrain from placing the name of the late Mr. Sweet, to whom the floricultural world owes much, and at the present day the Hon. and Rev. W. Herbert, a most eminently successful cultivator, who has extended the knowledge of this class of plants to a very high degree of perfection.

The name Gladiolus is derived from the Latin gladius, a sword, in allusion to the sword-like shape of the leaves. The predominant colour in the flowers is red, though it admits of every degree of variation, from the palest blush to the brightest scarlet, and from that to purple; yellow and white are both found in them. One species, G. cardinalis, is well known to afford the most striking contrast possible in any single flower—the ground colour of the petals being a most brilliant scarlet, with a clear white spot on each of the lower ones. G. ramosus is at the same time one of the newest and most beautiful of the species; the colour of this is a rich rosy lilac, deeply feathered with carmine: it possesses the singular character of producing lateral branches of flowers from the principal or main stem. G. psittacinus is another very highly ornamental species producing its thickly covered spikes of deep-red and yellow flowers in great profusion. These species, together with byzantinus, communis albus, and some other old species not now in general cultivation, attain a height of about two feet: the remaining and more choice sorts do not generally rise more than one foot or one and a half; this is a great advantage when forming a bed, for which they are peculiarly adapted, as their flowers are not of that ephemeral character which unfortunately distinguishes many of the popular flowers of the same season; and from their great diversity in height, colour, and general appearance, a very pleasing and natural group may be formed: only one objection appears tenable against this mode of growing them—their liability to become naked near the surface of the bed, though this partakes more of the exception than the rule, it being caused chiefly by an arid soil, and may be materially provided against in the formation of the bed, of which we shall speak presently.

Among the dwarfer species and varieties may be mentioned Præcox, Trimaculatus, Galeatus, Herbertii, Loddegesii, Roseus, Colvillii, Hirsutus, and Tristis—all of which are individually and collectively beautiful; this last is also fragrant, and although

it has been in our collections for nearly a century is still rather scarce. With this collection much might be done in the way of further improving the varieties of this flower; as nearly the whole of them seed freely with us; they may be grown with as little or less trouble than a bed of tulips. The situation they are grown in should be open and airy; the soil should be a mixture of sandy peat, loam, and old leaf-mould, in about equal parts, well chopped and incorporated. This soil should be ten inches or a foot thick, and if a stratum of old turf from a pasture be well chopped and laid in the bottom of the bed it will materially assist the plants in their greatest need, that is, just at the season of flowering: if turf is not to be had conveniently, cow-dung is equally efficient. The roots may be planted about the middle of March, three inches from the surface of the soil to the crown of the root. The best method of planting is to remove the entire surface of the bed to the depth required, and after having placed the roots in their respective places, return the earth over them. The worst possible way of planting any bulb is with the dibble: this forms an incrustation round the sides of the hole, in which the water collects and remains immediately beneath the bulb, to the great injury of the first spongioles produced by the plant; it should therefore never be used for the planting of such roots.

It may at first sight appear difficult to the uninitiated how to ascertain the position of the bulb in order to name them after covering them in the manner recommended; this may be easily known if the bed is square, by the method we mentioned in the first volume of the Journal, at the article on Ranunculus; and if the bed is circular or of an irregular form, a sketch of the bed might be taken on paper, and the respective situation of the bulbs marked on it as the roots are planted, thus avoiding the unsightly appendage of label sticks.

It is when the plants have attained their full size and are producing flowers that the lower part of the foliage fails (if at all); this, as we before remarked, is occasioned by drought, and as a preventive we recommend the turf in the bottom of the bed; but the plants may be assisted a good deal by placing round the stems, and covering the surface of the bed with pieces of rough hewn stone, shells, &c., and by interspersing the whole with moss; or by sowing the bed over with a small creeping annual;

the object being to prevent the intense action of the sun's rays on the soil, and the refraction of them from thence to the lower leaves of the plants at that particular season.

If the intention of the cultivator lead to the production of Hybrids, advantage should be taken of the first opening of the flowers, as the operation of displacing the anthers or pollen masses is performed with greater ease and more certainty than if deferred later; this of course should be done only to those flowers intended to obtain seed from. The impregnation of these flowers should not be done till the stigma appears ripe: this may be known by its slightly parting in the centre—it usually occurs about two or three days after the first opening of the flower; it should then be immediately done, and labelled with the name of the kind it is crossed with; this is of much consequence, as by keeping a correct account of the parent flowers of hybrids, a knowledge is obtained of the sorts best suited for the production of such hybrids. After being impregnated, the flower should be covered with a piece of gauze, or some other light substance, to prevent the ingress of insects.

The seed should be allowed to remain on the plants till the pods assume a pale brown colour, or begin to split on the outer edges, when it should be gathered, and the stems of the plants cut over; the bulbs may be then taken up, if it is required to move them, or they may be allowed to remain two or even three years in the same bed, taking the precaution to cover the bed with a thick layer of fresh leaves, sufficient to protect them from the frost of the ensuing winter; indeed some of the more delicate sorts are improved by being suffered to remain in the earth for that period, especially those which are called shy bloomers; only one thing is necessary to be observed, if the bulbs are left in the ground all the winter, care should be taken to prevent too great a quantity of rain falling on the bed, by covering it with a frame or some other contrivance.

The seed may be sown immediately after gathering, or it may be kept till the following spring; it should be sown in rather deep pans or boxes; if done in the Autumn, they should be kept in a cold frame, protecting them from frost; or if not sown till the spring, say the end of February, they may be placed in a gentle heat, just sufficient to start them, and then removed to a cold frame, to be inured by degrees to the open air. The

seed should be sown in a soil rather more sandy than that recommended for the mature roots. They should be slightly watered, whenever it appears requisite, during the summer, but they must be suffered to dry off rather sooner than the old roots in the autumn, and not excited too early in the spring; they may remain in the pans or boxes they are sown in during the two following seasons, giving them a slight top dressing previous to starting them the second spring, and attending to the removal of weeds, &c. After having completed two seasons in the boxes they should be taken out, and subjected to the treatment recommended for full-grown roots; the second summer many of them will blow, and in the third the whole of them.

We have thus given a slight sketch of the mode of growing this interesting genus, and intend in a future Number reverting again to the family of plants composing this beautiful and unique order. As a concluding remark, we beg to impress on the notice of our readers the necessity of duly considering the natural distribution of these, or in short any other plants they grow; for without a proper knowledge of the natural habitat of a plant it is next to an impossibility to assimilate the artificial with the natural habit of the plant. So these plants, being natives of the more temperate parts of the sandy plains of Southern Africa, the situation chosen to grow them in with us should be dry, airy, and yet warm, for with a redundancy of the one or a deficiency of the other of these requisites, the growth of the plants would be languid and the result of no effect.

Our plate is an apt illustration of the result of cross impregnation. They are two beautiful hybrids grown by Messrs. Lockhart, of Cheapside and Fulham, to whose kindness we are indebted for the opportunity of figuring them. It must be understood they are two distinct varieties, though appearing on one stem, it being merely an artistical arrangement of our draughtsman, Mr. Holden, who has succeeded in portraying them to the life; Messrs. Lockhart grow this lovely class of plants extensively, and in great perfection; in their collection may be found all those before mentioned, with many others; among them G. insignis, a fine large reddish crimson flower with purple blotch; G. inflatus blandus, a deep rose coloured hybrid variety; G. cardinalis blandus, and a great number of new hybrids not yet named. EDITOR.

## ON WATERING PLANTS GROWING IN POTS.

TO THE EDITOR OF THE FLORIST'S JOURNAL.

SIR,—Being a subscriber to your valuable little work, I frequently receive much useful information: allow me in return to contribute my mite. It has occurred to me that at this particular season of the year, when the greater part of our plants and flowers are placed in situations purposely selected, that they may enjoy the advantages attendant on a free exposure to pure air, I cannot do better than call the attention of your readers to a subject which, as it more immediately concerns vegetation in the open air, must be interesting to all: I allude to the supplying plants so situated with water—a subject which in my humble opinion exceeds all others in importance during the growing season, and yet in many cases it occupies least attention. Thinking this must arise from a want of knowledge of the great consequence of this branch of floriculture is my principal reason for addressing you. Every one must observe that plants, to become healthy and continue a vigorous growth, require a constant but properly-apportioned supply of light, air, and water—earth being regarded more as a medium for conducting the aliments contained in the former constituents. It is also equally evident that plants in the open air during the summer months must receive the greatest possible quantity, and at all times, of all these requisites except water, for which they are almost entirely dependent on the cultivator. And, without going into any chemical analysis, it is also clear that water forms one of the principal means by which the plant is enabled to meet the demands made on it by the other constituents in the shape of perspiration and evaporation—the latter being very great, especially on plants standing in pots exposed to the influence of the sun. And here we arrive at the most important consideration. Supposing the supply of water to be regulated by the demand—which in mild, medium sort of weather will be once a day, and in very hot weather twice—it follows that the relative temperature of the atmosphere and of the water applied should be also considered. It frequently happens that the soil in pots situated as above mentioned will be of a temperature as high as 70°, while water fresh from a well or closely covered vessel will

not be much above 40°; and if so applied a sudden reduction of the temperature of the soil takes place to the mean of two, and the plant feels a check, which must be injurious; and yet how frequently we see it used in such a state. Water intended for plants should always be allowed to stand at least one entire day in an open tank, and should never be applied but when the heat of it and the earth in which the plants stand assimilates, which is either early in the morning or towards the close of the day. On the whole the evening is the best time for watering during summer, as the earth is then cooled to about or rather below the temperature of the water; and if the latter is the warmest of the two it is the more beneficial, as in that case a corresponding rise takes place, and the plant exerts its functions with renewed vigour. It is impossible to lay down regulations for the supply, as that must vary with the subject—some plants requiring a larger share than others, and these again alter, of course, with the atmosphere: experience and a correct knowledge of the geographical character of the plant can alone supply the requisite information.

I intended offering a few remarks on the application of liquid manures, but must defer it till another opportunity. The present subject I send you at once, as during the warm weather likely to occur through the next two months it is of consequence that amateurs and, indeed, all who delight in or have anything to do with a garden be on their guard, or what they intend as kindness may prove the death of their favorites.

J. P.

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## THE CULTURE OF GLORIOSA SUPERBA.

Sir,—It is with much regret I remark that that beautiful plant, the gloriosa superba, is not so generally grown as it deserves. Imagining this to occur in consequence of the supposed difficulty of growing it, I forward you my mode of treatment, in the hope it may have a tendency to remove that difficulty, and ensure a place in every collection for this highly ornamental plant.

It is a native of the East Indies; and, like other intertropical plants, requires a strongly-marked seasonal treatment. As these remarks will be too late to assist or apply to the growth

of the plant during the current season, I will begin with the period of rest. This usually takes place about the middle or end of October. As soon as the foliage and stems have decayed the pot should be removed from the bark bed and placed in a dry part of the house—an elevated shelf is the best—at a distance from the fire, as all the heat necessary at this time is just sufficient to preserve the earth about the tubers from damp. Another pot, one size larger, should be inverted over it to prevent water or other moisture having access to the roots. A very great error is sometimes committed in leaving the root to start in the same pot and soil it grew in the previous year. The plant naturally requires about six months' rest: consequently, should remain undisturbed till about the middle of March; when it should be shaken out of the old soil, taking care not to break them unless nature has shown where it is practicable to separate them easily. The soil used for repotting should be composed of about equal parts good sound loam and peat or heath-mould of good quality. The pots to be suited to the size of the root—those about six inches over are usually employed: and here it must be explained, the shoot for the ensuing year being formed at the base of the new tuber, in repotting the root should be inverted, placing the bottom upwards, or otherwise it has to struggle through the whole mass of earth contained in the pot, which it often fails in doing. In potting, therefore, the base of the tuber should be kept just above the surface of the earth in the pot, from whence as soon as it begins to grow it will emit fresh roots into the soil below; it should be plunged into the bark bed of a stove or vinery, or placed in a cucumber frame, with a temperature of about 70°. But little water is required at first, which should be increased as the plant grows. About the end of April, if growing strongly, another shift may be given—placing it this time in a large pot, with a soil similar to that before recommended; at the same time securing a perfect drainage. The plant will now grow rapidly, and may be trained in any desirable form. Plenty of water should be given during the summer, with occasional syringing over head.

With this treatment an abundant supply of its brilliant flowers and healthy roots at the same time are certain to be obtained.

J. T. Bruce.

## VISITS TO NURSERIES.

### MESSRS. WILMER AND SONS, KING'S ROAD, CHELSEA.

We lately saw a very fine bloom of Carnations and Picottees at this place. Messrs. Wilmer are well known to the public, and their collection of florist's flowers at Sunbury has long been the source from whence many good flowers have been obtained. They have lately added this place (formerly in the occupation of Mrs. More,) to their other in Sunbury. The collection contains sufficient variety to satisfy the most fastidious; as almost every new flower possessed of good points is included, in addition to the older and established favorites.

Among them we noticed, as particularly fine, Hale's Prince Albert carnation—a beautiful scarlet bizarre; the colours of which are as distinct as could be wished, the white remarkably clear, the petals of good texture, and the flower large—altogether a fine, bold, striking variety; and, in five or six pots of it, not a bad flower. Tate's Tally-ho' crimson bizarre is another good flower. A seedling—Wilmer's Hortensis, P. B.—was also fine. Among the flakes we may mention Wilmer's Lord Errol, S. F., Wildon's Earl of Lichfield, S. F., Wilmer's Endymion, R. F., and Wollard's Queen Victoria, S. F., as being really good flowers.

The Picottees were very numerous, and the bloom remarkably fine. In these flowers we think there is room for improvement even yet, notwithstanding the immense number included in some of our leading florists' lists, many of which, doubtless, have valuable properties; but we never yet saw a Picottee such as we should call a ne plus ultra. Our idea of perfection may be guessed at if a combination be imagined of the colours and delicacy of the present Picottee and the smooth edge and substance of the Carnation. Wilmer's Niobe is a fine flower in its class—a red Picottee. There were also several good flowers of Giddins's; such as, Plenipo, P. P., Vespasian, P. P., Diana, &c., and Wilmer's Queen, light-edged, P. P., and their Diadem, heavy-edged P. P., may be also classed as requisite flowers in every collection.

We cordially wish Messrs. Wilmer the success they deserve in this place; as, from its immediate vicinity to town and the extensive assortment of this class of flowers grown, they afford every florist, either in their own neighbourhood or visiting London, an opportunity both for inspection and selection.

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## LITERARY NOTICE.

*Botany for Ladies; or, a Popular Introduction to the Natural System of Plants.* By Mrs. LOUDON.—*Murray, London.*

WHEN we noticed Mrs. Loudon's First Book of Botany in our last Journal, we recommended it from a conviction of its utility: we are of the same opinion still, though in the work before us the authoress has almost superseded the use of it, or rather we should say, has so enlarged the remarks and explanations necessary as to make the present Introduction a most efficient one; so much so that we feel confident a knowledge of familiar botany may be obtained without any other guide. By a direct and easy method the reader is introduced to the classification of plants according to the natural or Jussieuan system, as improved by Candolle. The work is divided into two parts: in the first, the most distinct and important natural orders are treated of, and their characteristics illustrated by references to familiar species of each, with numerous woodcuts of the flowers and their botanical structure. In the second part the whole, and consequently, the more difficult and obscure orders are described, and their constructions defined and explained in a comprehensive manner. We extract the following notice of the popular order, Violaceæ:

"The order Violaceæ, though not a large one, contains several genera; but the most interesting is the genus viola, which includes, among many other species, the sweet violet (*viola odorata*) and the heartsease (*viola tricolor*). The flowers of both species have many claims to admiration, but they do not add the charm of regularity in construction to their other attractions, as in fact few flowers are less symmetrical. The flowers of both are nearly alike in their details, but, to avoid confusion, I will describe them separately. The calyx of the heartsease consists of five pointed,

distinct sepals, two of them rather smaller than the others. These sepals are not attached—as in most other plants—at their base, but so as to leave nearly a quarter of their length standing up, far beyond the place where they are fixed to the receptacle, so as to form a sort of border or cup round the stem and between it and the flower. The sepals are green, but they are edged with a delicate, whitish membrane at the margin, scarcely to be seen without a microscope. There are five petals, which are also irregular in their construction—two of them being much larger than the others, and generally of different colour, one even of the other three being quite different from its companions. The two large petals at the back of the flower, which in the common heartsease are generally dark purple, are laid over each other and behind the two below them. These two side petals, which form the centre of the flower, are both furred at the base; and the lower petal, which is placed between them, has its claw drawn out behind into a spur, which passes between two of the sepals, and which, when the flower is looked at from behind, appears to part off the calyx. The furred part of the two-side petals forms a triangular, roof-like opening, pressing out of which is seen a small, pale, green, ball-like substance, which a fanciful imagination might liken to a head looking through a dormer window; and this is all that is to be seen in place of the usual apparatus of stamens and pistils. As all seed producing flowers must have stamens and pistils, and as it is well known that heartseases and violets produce seed in abundance, it is clear that these important organs are not wanting. But where are they? It is easy to guess, after being so far initiated in the mysteries of botany, that the little globular body is a part of the pistil; but where are the stamens? It is necessary to pull the flower to pieces to discover them. Commencing this work of destruction, which I always feel remorse at perpetrating—for I love flowers too well not to feel pain at destroying them—commencing this work, I repeat, the petals and the sepals must be carefully removed from the stem—a task of some little difficulty, as both sepals and petals are firmly attached to the receptacle, and the lower petal must have its spur opened with a pin, to avoid hurting the delicate organs it contains. When the outer coverings of calyx and corolla are thus both removed the seed-producing organs will be discovered, and it will be found that they consist of five very curiously formed stamens, with as singular a pistil in their centre. The stamens have no apparent filaments; and anthers, which seem to be inserted in the receptacle, look like seeds, each tipped with a bit of brown skin, and having what appears to be a white rib in front. This rib is the anther, and the broader part is the dilated filament, which is drawn out beyond it on both sides and above so as to form the brown tip above the anther already mentioned. Two of the anthers have each, in addition to the peculiarities, a long tail, which the spur of the lower petal concealed when the flower was in a perfect state. The pistil consists of a large ovary, full of ovules, with a narrow style, which

is drawn out into the hollow globular termination which is seen through the triangular opening in the flower. The globe has an opening in front, under which is a kind of lip, which looks like a shutter, let down to show the opening; and though, from its thick, fleshy nature, it looks like a stigma, it is only the outer covering of that organ, for the stigma lies within the covering. In this manner the stigma and anthers are completely concealed; and thus it will be seen that nothing can be more complex and intricate than the construction of the flowers of the heartsease. Who could suppose that all these elaborate details would be necessary to illustrate so simple a flower as that of the violet? and yet the construction of the flowers of the violet and those of the heartsease are essentially the same."

Our limits will not allow us to pursue the present notice further; but on the first favorable opportunity we shall turn again with pleasure to the perusal of this interesting little work. Meantime we earnestly recommend it to the notice of our fair readers, as an entertaining and necessary companion to the flower-garden.

EDITOR.

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## LIST OF NEW PLANTS.

### Hexandria Monogynia—Amaryllidaceæ.

*Habranthus Pratensis.* A beautiful Amaryllis-like plant, with rich red and yellow flowers: a native of South Chili; particularly valuable as a free, early, and highly ornamental stove-plant; requiring the treatment usual for plants of the same order.—*Pax. Mag. Bot.*

### Octandria Monogynia—Rutaceæ.

*Boronia Anemonæfolia.* A very peculiar and pretty addition to this well-known and favorite genus—flowers, bright pink, beautifully varied by the yellow stamens in the centre. The plant is of a compact, branching habit, the leaves composed of from three to five leaflets, usually tinged with yellowish green or brown, requiring a light, airy situation in the greenhouse; to be grown in light loam, with a little peat or heath mould. Seeds were imported by Messrs. Loddiges from New Holland.—*Pax. Mag. Bot.*

Polyandria Pentagynia—Ranunculaceæ.

*Heleborus Orientalis.* A greenhouse, herbaceous perennial, resembling H. niger, the Christmas rose, but has purplish flowers. A native of Asia, introduced in 1840.—*Bot. Reg.*

Octandria Monogynia—Balsaminaceæ.

*Tropæolum Edule.* So named from the edible purposes to which its roots are applied—a pretty intermediate species between T. tricolorum and T. brachyseras; flowers, bright yellow when expanded, leaves longer than the above-named species, and requiring a similar mode of culture.—*Pax. Mag. Bot.*

Syngenesia Superflua—Compositæ.

*Cineraria Webberiana.* One of the best blue cinerarias we have yet seen; raised in the spring of last year by Mr. Smithers, gardener to Robert Williams, Esq., of Dorchester, named in compliment to Mr. Webber, of Merriott Nurseries, near Crewkerne, Somersetshire; in habit approaching C. Waterhousiana, but more compact; foliage ample, tinged with purple on the under side; flowers are numerous and large, of a brilliant rich blue.—*Pax. Mag. Bot.*

Decandria Monogynia—Rutaceæ.

*Eriostemon Salicifolius.* An erect, greenhouse shrub, a native of New Holland; when first introduced was described as Crowea Scabra. In general appearance it resembles that genus, and requires the same treatment.—*Bot. Mag.*

Diandria Monogynia—Scrophulariaceæ.

*Veronica Nivea.* A very pretty greenhouse plant, from the mountains of Van Diemen's Land, where it was found by Mr. Gunn. The plant is half shrubby, of strong habit, rising about a foot and half high; the flowers are pure white.—*Bot. Reg.*

Hexandria Monogynia—Berberaceæ.

*Berberis Umbellata.* Seeds of this plant were received from Nepaul by W. Wells, Esq., of Redleaf, in whose garden it has flowered. Its distinguishing characters are its remarkably slender branches and spines, and the narrow glaucus foliage; the flowers are small, and produced on long stalked umbels.—*Bot. Reg.*

Pentandria Monogynia—Rubiaceæ.

*Rondeletia Odorata.* A very splendid stove plant, introduced from Havannah.—*Bot. Mag.*

Gynandria Diandria—Stylideæ.

*Stylidium Pilosum*—also called *S. Dicksonia.* A neat little greenhouse perennial, from the Swan River Colony; it requires to be grown in sandy peat and a small proportion of loam, and also to be kept in small pots, with the treatment of a sub-aquatic during the growing season, but rather dry during the winter, and in a cool, airy part of the greenhouse: it is easily increased from seed.—*Edwards's Bot. Reg.*

Didynamia Gymnospermia—Gesnerieæ.

*Gesneria Longiflora.* A native of Guatemala, from whence it was sent by Mr. Hartweg to the Horticultural Society. The plant grows about two feet high, and is closely covered with a dense, gray down; the flowers are produced, long, terminal, whorled racemes; colour brick red; requires the treatment usual for gloxinias, &c.—*Edwards's Bot. Reg.*

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## THE FLORIST'S LETTER-BOX.

### TO CORRESPONDENTS.

Mr. J. Stewart's Pansies.—Our opinion of them is: No. 1, Emily: colours good and distinct; tolerably good form, but not first-rate; flat edge, a little serrated; worth keeping. No. 2, Anne: form very good; smooth edge, flat, and colour sufficiently distinct to make it a desirable variety; rather small, but will probably improve. No. 3, La Candeur: worthless. No. 4, Duchess de Palma: good size and very rich colour, but deficient in shape; serrated edge; not worth keeping as a show variety. No. 5, Prince of Wales: too far gone to enable us to judge. No. 6, Grande Monarque: shape, edge, and general form unexceptionable; beautiful bright blue and primrose; quite a first-rate.

AMICUS.—Petunias seed freely in the open air, and succeed better treated as half-hardy annuals; the seed should be sown early in March, and the plants placed in the open border the end of May; new varieties are thus obtained.

A FLORIST.—Youell's Anacreon is decidedly a red Picottee.

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## CALENDAR FOR AUGUST.

STOVE. During this month the climbers in this department are usually in their greatest perfection; they should consequently occupy first attention. Regulate the growing shoots and flowers in a natural manner; particularly guard against a crowded appearance: free growing kinds may be pruned in whenever necessary. Much care is constantly required to keep the plants free from insects, as during the clear, bright, and generally warm weather of this month, red spider and other similar pests increase rapidly, and if not speedily destroyed form a nidus, from which much trouble and mischief may be expected all winter. All repairs should be immediately completed, as it is much better to re-pot and arrange the plants toward the end of this month than to defer it later, as by being shifted early, the plants have time to become re-established and recover from the check necessarily attendant on repotting before the gloomy weather and cold nights of Autumn approach; in doing this give a good and thorough drainage to every plant, using the soil as rough as possible. Pot off cuttings that are struck, and any seedlings that are sufficiently advanced in growth; top dress plants that do not require a regular shift. Amaryllis and other bulbs that have completed their growth may be gradually dried off. Seed either imported or saved may be sown this month, though not later; air should be given freely every day. If orchideæ are grown, the house should be closed early in the afternoon towards the end of the month.

GREENHOUSE. Here, too, early attention should be paid to shifting those plants which may require it, particularly slow-

growing and hard-wooded kinds. It is always best to repot a little before it is necessary to bring the plants into the house: it is a very common but very bad practice to repot plants just before they are housed, especially if the house is badly ventilated. We cannot too strongly insist on the necessity of thoroughly draining all that are not actually aquatics, without it strong and healthy plants cannot be had. As geraniums go out of flower cut them down and propagate from the cuttings; repot them at the time they are pruned in; they may be usually put into a pot something smaller than those they flowered in. Balsams, cockscombs, amaranthus, and other tender annuals should still continue to fill all the vacant spaces; and to preserve them in bloom as long as possible, all decaying flowers should be removed, as also as much of the seed as can be spared: give them a good watering once or twice a week with liquid manure. Cacti and other succulents should have a full exposure to the light and sun, to enable them to ripen their new stems, and to form flower-buds for the next season; cuttings of verbenas, fuchsias, geraniums for bedding, and other plants adapted for the same purpose should be put in to be kept in small pots through the winter. Attend to the general cleanliness of the plants retained in the house; they require a liberal supply of water every day; as much air as possible should be admitted every day, and about half the quantity at night. If seeds have been obtained from any of the plants, they should be sown immediately.

Flower Garden. Attention must now be directed to the advancing stems and flowers of dahlias: the shoots of strong growing kinds may be thinned out, those left must be securely fastened to stakes, the old ties should be loosened where necessary; the buds of choice varieties should be thinned, if blooms are wanted for exhibition, so as to throw strength into the remaining buds; a little mulch placed round the base of the stems will be found of much service. Place traps for earwigs. Layers of picottees, carnations, &c., may be taken off and potted as soon as they are struck; pipings of pinks and pansies may be planted in beds for the winter if well rooted. Top dress and repot auriculas that require it; by the end of the month they may be placed in the frames they are intended to occupy during the

winter, though the lights must be kept off so long as the fine weather lasts, only protecting them from heavy rains, they will also require shading from the hot sun; pick off decaying leaves, and if green fly appear fumigate immediately. Finish planting out all biennial and perennial herbaceous plants; in collecting seed care should be taken to gather it perfectly dry, and quite ripe. Chrysanthemums should have a constant and liberal supply of water, as recommended last month; if large specimens are wished, some of the finest should be repotted into twelve sized pots, using a very rich soil; if dwarf plants are required, frequent stopping should be had recourse to. Continue to fill up vacant spaces in the flower-beds and borders. Mignonette, nemophilla, and other annuals may now be sown to bloom through the winter in the greenhouse; biennials intended for the same purpose should also be sown now. Several kinds of China roses may yet be propagated by cuttings, as also most hardy herbaceous plants that require this method of increase. The roots of tulips, ranunculus, &c., should be occasionally looked over to ascertain if they are perfectly dry.

## FLORICULTURAL INTELLIGENCE.

Horticultural Society. The third and last show took place on Saturday, July 9th, in the Society's grounds, Chiswick. A very large number of fine seedling Pelargoniums was exhibited, in consequence of additional prizes being offered for them by the new Pelargonium Society.

Mr. Foster's seedling Sultana received the first prize, being adjudged a first-class flower. The following received second-rate prizes: Prince of Wales and Sir Isaac Newton, from Mr. Pamplin, of Walthamstow; Constellation, Milo, Actæon, and Gros, from the Rev. R. Garth; as also Flambeau, from the same gentlemen. Among those not receiving prizes were some good flowers: in Mr. Foster's seedlings we noticed Lord Chancellor and Lady Villiers; in Mr. Gaines's, of Battersea, were Eclipse Imperialis, Pride of Surrey, Princess Royal, and Duchess of Sutherland; from Mr. Pamplin, Creole, Queen of Sheba, Aurora, Ada, Count d'Orsay, Fair Maid of Leyton, Attila, Queen of the East, Acis, Venus, Achilles, and Countess of Wilton; from Mr. Silverlock, of Chichester, Beatrice and Marianne; from Mr. Russell, of Battersea, Celestial; and from H. Wise, esq., Lord of the Isles. Pelargoniums in collections were again exhibited by Mr. Gaines, Mr. Catleugh, Mr. Cock, Mr. Barne, and Mr. Garratt. Mr. Catleugh's twelve were, Una, Matilda, Madonna, Lucretia, Comte de Paris, Coronation, Beauty, Cecilia, Witch, Eliza, Wonder, and Master

Humphrey. Mr. Gaines's six were, Victory, Juba, Louis Quatorze, Sirius, Lady Murray, and a seedling.

The single specimens of STOVE and GREENHOUSE PLANTS were very splendid. From Mr. Goode, gardener to Mrs. Lawrence, of Ealing Park, were, Abutilon Bedfordianum, Babingtonia camphorosma, Cuphea Melvillii, and a very fine Euphorbia splendens; from Mr. Bruce, Erica iridifolia; from Mr. Barnes, Clerodendron squamatum, Helichrysum humile, Ixora coccinea, Swainsonia coronillifolia, Gesneria rupestris, and Boronia vimenea; from Mr. Beck, of Isleworth, Fuchsia ignescens; from Mr. Story, Fuchsia pulchra; from Mr. Lane, Fuchsia corymbiflora; from Mr. Cuthill, of Camberwell, Lisianthus Russellianus; from Mr. Mylam, gardener to — Rucker, esq., Nepenthes distillatoria; from Mr. Edmonds, gardener to his Grace the Duke of Devonshire, at Chiswick, Banksia speciosa; from Mr. Pamplin, a handsome seedling Cactus.

In Messrs. Rollisson's collection of ORCHIDEOUS PLANTS were fine specimens of Vanda Roxburghii, Stanhopea occulata, Phaius albus, a new species of Ærides, and that splendid plant Stanhopea Wardii var. pallida, reflecting great credit on our friend Mr. Don; a new species of Brassia was exhibited by Mr. Appleby, and a plant of Barkeria spectabilis by Mr. Brewster, gardener to Mrs. Wray, Cheltenham.

ROSES were shown in large collections by Messrs. Lane, Milne, Paul, Hooker, Rowland, Cobbett, Leslie, and Betteridge.

The PICOTTEES and CARNATIONS afforded a splendid display. They were shown by Messrs. Wilmer, Orson, Bridges, Smith, Halloway, Hodges, Edmonds, Norman, Barnard, and Burrup. Mr. Orson's twenty-four were, Mansley's Euclid, Mansley's Robert Burns, Mansley's Shakspeare, Lascelle's Maid of Sparta, Simpson's Marquis of Granby, Woollard's Queen Victoria, Woollard's Tally-ho', Barringer's Enchantress, Pugh's Haidee, Soam's Bloomsbury, Harvey's Maria, Marsden's Jolly Angler, Ely's Mrs. Brand, Ely's Mrs. Birkell, Ely's Lady Ely, Ely's Duke of Wellington, Wood's William the Fourth, Chadwick's Brilliant, Cartwright's Rainbow, Pearson's Sir George Crewe, Jacques's Georgiana, and Wilmer's Conquering Hero.

Messrs. Lane and Son exhibited a fine hybrid FUCHSIA, the flowers of which are large, and an abundant bloom, the sepals are rose-colour, and the petals a fine purple.

The following is the list of Prizes:

STOVE and GREENHOUSE PLANTS. In collections of from fifty to sixty plants: Gold Knightian, Mr. Goode, gardener to Mrs. Lawrance. Ditto, in collections of from fifteen to twenty: Gold Banksian, Mr. Barnes, gardener to G. W. Norman, esq.; Large Silver, Mr. Green, gardener to Sir E. Antrobus; Silver Knightian, Mr. Redding, gardener to Mrs. Marryatt; N. Gold Banksian, Mr. Catleugh; N. Large Silver, Mr. Fraser; N. Silver Knightian, Mr. Pawley. Collections of six species: Large Silver, Mr. Bruce, gardener to Boyd Miller, Esq.; N. Large Silver, Mr. Catleugh.

STOVE and GREENHOUSE CLIMBERS. Large Silver, Mr. Goode.

PELARGONIUMS. Large collection: Gold Banksian, Mr. Cock, Chiswick;

Large Silver, Mr. Burne, gardener to Sir E. Paget, Chelsea Hospital; Silver Banksian, Mr. Garratt; N. Gold Banksian, Mr. Gaines; N. Large Silver, Mr. Catleugh. Small collection: Silver Gilt, Mr. Cock; Silver Banksian, Mr. Garratt, gardener to Sir H. J. Fust; N. Silver Gilt, Mr. Catleugh; N. Large Silver, Mr. Gaines.

Moss Roses. N. Silver Knightian, Messrs. Lane and Son, Great Berkhampstead; N. Silver Banksian, Mr. Cobbett, Horsell, and Mr. S. Hooker, Brenchley.

Common Garden Roses. Large Silver, Mr. Milne, gardener to C. T. Chauncey, esq.; Silver Banksian, A. Rowland, esq.; Silver Knightian, Mr. Betteridge, Milton Hill; N. Large Silver, Mr. Hooker, Brenchley, and Mr. Cobbett; N. Silver Knightian, Messrs. Lane and Son and Messrs. Paul and Son, Cheshunt.

China Roses. Large Silver, Mr. Milne and Mr. Betteridge; Silver Banksian, Mr. Leslie, gardener to J. Fleming, esq.; N. Large Silver, Messrs. Lane and Son and Messrs. Paul and Son; N. Silver Knightian, Mr. Cobbett and Mr. Hooker.

Carnations. Large Silver, Mr. Burrup, Vassal road, Brixton; Silver Knightian, Mr. Barnard, Brixton; Silver Banksian, Mr. Allaway, Reading; N. Large Silver, Mr. Norman, Woolwich; N. Silver Knightian, Mr. Dickson, Acre-lane, Brixton; N. Silver Banksian, Mr. Orson, Kennington, and Mr. Wilmer, King's road, Chelsea.

Picottees. Large Silver, Mr. Barnard, Brixton; Silver Knightian, Mr. Edmunds, Wandsworth; Silver Banksian, Mr. Allaway, Reading; N. Large Silver, Mr. Dickson, Acre-lane, Brixton; N. Silver Knightian, Mr. Norman, Woolwich; N. Silver Banksian, Mr. Wilmer, Chelsea, and Mr. Wilmer, Sunbury.

Seedling Florists' Flowers. Pelargoniums: Silver Knightian, E. Foster, esq. and Mr. Pamplin, Walthamstow; Silver Banksian, E. Foster, esq. and Rev. R. Garth, Farnham; and Certificates to Messrs. Gaines, Pamplin, Smith, and Allaway; Mr. Green, for Calceolarias; and Mr. Kyle, for Verbenas.

Cape Heaths. Twenty species: Gold Knightian, Mr. Barnes, gardener to G. W. Norman, esq.; Silver Gilt, Mr. Goode, gardener to Mrs. Lawrance; N. Silver Gilt, Mr. Jackson, Kingston. Six Species: Gold Banksian, Mr. May, gardener to E. Goodheart, esq.; N. large Silver, Mr. Pawley, Bromley.

Exotic Orchidaceæ. Gold Banksian, Mr. Mylam, gardener to — Rucker, esq.; Large Silver, Mr. Goode, gardener to Mrs. Lawrence; Silver Knightian, Mr. Barnes, Mr. Appleby, and Mr. Redding. Exotic Orchidaceæ, single specimen: Large Silver, Mr. Brewster, gardener to Mrs. Wray, for Barkeria spectabilis; Silver Knightian, Mr. Appleby, for Brassia nov. sp.; Silver Banksian, Mr. Barnes.

Single specimen of Ornamental Plants. Large Silver, Mr. Mylam, Mr. Denyer, Nurseryman, Brixton, and Messrs. Lucombe, Prince, and Co., Exeter; Silver Knightian, Mr. May and Mr. Goode; Silver Banksian, Messrs. Barnes, Cock, Edmonds, Veitch and Fraser, Lee, Bailie, and Lane.

CLAPHAM PINK SHOW. June 29. Award of prizes:

1. Mr. Lastlett, of Kennington;
2. Mr. Brown, Clapham;
3. Mr. Heath, Clapham;
4. Mr. Fairburn, Clapham.

[We shall feel obliged to our friends who kindly send us accounts of floricultural exhibitions, to furnish us also with the names of flowers obtaining prizes.]

NOTTINGHAM FLORAL AND HORTICULTURAL SOCIETY. Second Meeting—Assembly Rooms, June 29th.

The Roses were very splendid, from the humble though lovely Eglantine to the gorgeous Rosa Gallica. This department was greatly enriched by the splendid collections from the gardens of Mr. J. Pearson, of Chilwell; Mr. Frettingham, of Beeston; and Mr. S. R. P. Shilton; and more especially by a beautiful pan of hardy Roses from Mr. J. Pearson's. The Pinks were very good; and the collection of Mr. John Robinson attracted great attention. The display of Stove, Greenhouse, and Miscellaneous Plants was brilliant and gorgeous in the extreme.

RANUNCULUSES. Best collection, Mr. Frettingham; second, Mr. Lee.

ROSES. The best pan of 24 blooms (for dealers only), Mr. J. Pearson: Velours Episcopale, Bouquet de Florœ, Silene, Hippocrate, Madame d'Esprey, Rubens, Tourtelle, Lilac Queen, the Prince, Latifolia, Eclat des Roses, Madame du Barry, La Fayette, Superb Marbled, Miralba, Striped Moss, Rugæ, Armosa, General Hoche, Polandæ, Fontaine, La Grandeur, La National, Madame Mortien. The second best dealers' pan, Mr. Frettingham: Anclin, Victorious, Princess Augustus, Daphne, Amy Robsart, Violette Cremot, Besançon, Duke of Devonshire, George the Fourth, d'Hurm, Cornet Carron, Stadtholder, Oracle du Siècle, Brennus, Madame Hardy, Deportus, Aspasia, Miss Isaac, Armosa, Philippe Quatre, Violet Blue, Columbine, two Unknown. The third dealers' pan, Mr. T. Wood. The best pan of 24 blooms (amateurs only), Mr. S. R. P. Shilton: Provence—Cristata, Grande Agathe, Wilberforce, Blush; Moss—Blush, Luxembourg, White Bath; French—Grillon, Oracle du Siècle, Triomphe de Rennes, Leontine; Hyrbrid Provence—Agnes Sorel, Duchesse d'Angoulême, la Vestale; Hybrid China—Brennus, Catel, Coup d'Hebe, Legouve; Rosa Alba—Fanny Sommerson, Josephine Beauharnois; Perpetual—Triomphe de Montmorency, Maria Denise; China—Eugene Beauharnois; Bourbon—Emile Courtier. The best pan of 15 blooms (amateurs only), Mr. J. Robinson; the best pan of 12 blooms, G. Walker, esq.; the best pan of 12 blooms, Mr. Hutchinson; the best pan of 6 blooms, Mr. S. Buswell: the best collection of Roses (dealers only,) Mr. J. Pearson; second best collection Mr. Frettingham; the best collection (for amateurs only), F. Wright, esq.; second best collection, Mr. S. R. P. Shilton. Moss, Mr. Pearson; 2d, Mr. S. Shilton. French,

Mr. Pearson; 2d, Mr. Shilton. Hybrid Provence, Mr. Pearson; 2d, Mr. Shilton. Hybrid China, Mr. Pearson; 2d, Mr. Shilton. Alba, Mr. Pearson; 2d, Mr. Shilton. Scotch, Mr. Shilton; Austrian Briar, Mr. Pearson. Damask, Mr. Pearson; 2d, Mr. Shilton. Provence, Mr. Shilton. Sweet-briar, Mr. Pearson; 2d, Shilton. Austrian Briar, Mr. Pearson. Ayrshire, Mr. Pearson. Multiflora, Mr. S. Shilton. Evergreen, Mr. J. Pearson. Boursault, Mr. Pearson. Hybrid Climbing, Mr. Pearson; 2d, Mr. Shilton. Perpetual, Mr. Pearson; 2d, Mr. Shilton. Bourbon, Mr. Pearson; 2d, Shilton. China, Mr. Pearson; 2d, Mr. Shilton. Musk, Mr. Shilton, Tea China, Mr. Pearson. Miniature, Mr. Pearson. Noisette, Mr. Pearson; 2d, Mr. Shilton. Macartney, Mr. Shilton. Microphylla, Mr. Shilton. Hybrid perpetual, Mr. Shilton. Extra Prize (hardy Roses), Mr. J. Pearson—Lilac Queen, Fulgens, Legouve, la Rudcorn, Klefer, Titus. Fimbziata, Fanny Sommerson, Ne plus ultra, Coccinea superba, Village Maid, Triomphe d'Angers, Madam Hardy, Belle Parabore, Duc de Trevise, Blarii, Brennus, Aspasia, Princess Augusta, Velours episcopale.

Pinks. Three best pair of blooms, Mr. F. Wood—Janson's Lady Milner, Admiral Codrington, Dreadnought, Lady Pavoy, Lodge's Paulina, Parry's Union. Second best three pairs, Mr. Lee—Dr. Johnson, Green-side, Criterion, Seedling, Duchess of Devonshire, Snowball. Third best, Mr. Robinson—George the Fourth, Earl Grey, and Snowball. Fourth best, Mr. J. Pearson. Best pair of purple-laced, Mr. J. Robinson. Best pair of purple-laced Seedlings, Mr. J. Robinson. The best pair of red-laced Seedlings, Mr. Lee. The best collection, Mr. J. Robinson.

Pansies. The best pan of 20 blooms (dealers only), Mr. J. Pearson; second best, Mr. F. Wood; third best, Mr. Lee. The best pan of 20 blooms (amateurs only), Mr. J. Nevill—Ann, Chimpanzee, Captivation, Mrs. Hamworth, Delicata, Mary Ann, Larpent, Conqueror, Queen of Scots, Salaria, Jewess, Cream, Jehu, Beauty of Hitching, three seedlings, Eclipse, Mary, Wellington; second best, Mr. S. R. P. Shilton—Captivation, Jewess (Lidyard's), and eighteen seedlings; third best, Mr. Gillson—Coronation, Conqueror, Mrs. Thesiger, Climax, Mary, Ann, Jewess, Queen of Scots, Ne-plus-ultra, Carlo Dolci, Rival Yellow, Melpomene, Miss Jane, Queen, Rainbow, Triumphant, Lady Flora Hastings, Conservative, Diana, seedling. Ten blooms (amateurs only), Mr. J. Robinson—Chimpanzee, Eliza, Lady Wetherall, and seven seedlings. The best collection of cut flowers, Mr. J. Pearson; second best, Mr. Frettingham. The best 6 annuals, Mr. S. R. P. Shilton—Phlox Drummondii, Schizanthus Priestii, Heliopila Araboides, Zimnia Elegans, Schizanthus Priestii, Oxymura Chrysanthemoides; second best, Mr. Frettingham. The best 3 stocks, Mr. S. R. P. Shilton. The best bouquet, Mr. S. R. P. Shilton.

Plants. The best 6 geraniums, Mr. Frettingham—Sylph, seedling, Dennis's Perfection, Alicia, Alexander, unknown; second best, Mr. J. Pearson—Sylph, Alicia, King, Clarissa, Conservative, Alexandrina. The best seedlings, Mr. Frettingham. The best collection, Mr. J. Pearson. Stove Plant (Rondelesia Speciosa), G. Walker, esq.; second ditto (Vinea

Rosea), ditto. Orchideous Stove Plant (Orchideum Pulv.) ditto; second ditto (Cattleya Intermedia) ditto. Greenhouse (Pimelia Linifolia), F. Wright, Esq.; second ditto (Roella Ciliata), ditto; collection of Greenhouse Plants (Helichrysum Proliforum, Thunbergia Alata, Thunbergia Alata Alba, Swainsonia Galegifolia, Polygata oppositifolia, Fuchsia Fulgens Gaulphemia Splendens, Poivea Coccinea, Campanula Garganica, Dracophyllum Graciles), ditto. Erica Ventricosa, ditto; second ditto (Eximea), ditto; Cactus Speciosissima, G. Walker, esq. Six Fuchsias (Fulgens, Lee's Dark, Globosa, Chandlerii, Buestii, Fulgens Multiflora, Mr. J. Pearson. Six Verbenas, Mr. Lee. Herbaceous Plants, Mr. J. Pearson; second ditto, Mr. Frettingham. Collection of American Plants, ditto; second ditto, Mr. J. Pearson. Lillium Eximea, ditto. Penstemon Gentionoides Coccinea, ditto. Collection of Dianthuses, Mr. J. Nevill. Vines in pots (honorary), Mr. Hopcraft.

BIRMINGHAM AND MIDLAND FLORAL AND HORTICULTURAL SOCIETY. Second Exhibition, June 23, 1842.

ROSES. Premier: Yellow Noisette, John Gough, esq. (Gr. C. Sharp.) Moss: 1, Provence, Mr. John Moore; 2, Blush, John Gough, esq.; 3, Crimson, Mr. J. Coudrey. White: 1, Unique, J. Gough, esq.; 2, Princess de Lambelle, Mr. J. Coudrey; 3, Globe White Hip, Messrs. Pope and Sons. Pink: 1, Coutarde, Mr. J. Coudrey; 2, Blush Belgie, Mr. Moore; 3, Bella Maria, Mr. Coudrey. Blush: 1, Duchesse d'Angoulême, Mr. Coudrey; 2, Ruga, Messrs. Pope and Sons; 3, Bella Augusta, Mr. Coudrey. Red: 1, Athelin, Mr. Edwin Phillips; 2, Ne Plus Ultra, Mr. Coudrey; 3, Gigantic Velvet, Mr. Coudrey. Purple: 1, George the Fourth, Mr. Joseph Cole, Rugby; 2, Violet Blue, John Gough, esq.; 3, Princess Augusta, Mr. Coudrey. Dark: 1, George the Fourth, Mr. Coudrey; 2, Tuscany, Mr. Coudrey. Striped or Mottled: 1, Queen of Beauty, Messrs. Pope and Sons; 2, Rosa Mundi, Messrs. Pope and Sons; 3, Painted Damask, Messrs. Pope and Sons; Noisette or Cluster: 1, Ornament de Parade, Mr. E. Phillips; 2, Demeaux, Mr. Moore; 3, Le Grand, J. Gough, esq.

PINKS. Premier: Duke of St. Alban's, Mr. John Haines, Tipton. Dark Laced: 1, Duke of St. Alban's, Mr. Haines; 2, Eliza, Mr. Coudrey; 3, Elizabeth, Mr. Haines. Red Laced: 1, Rainforth's Prudence, Mr. Coudrey: 2, Duke of Buckingham, Mr. Coudrey; 3, Emperor, Mr. Haines. Plain: 1, Lea Arrow, Mr. Haines; 2, Seedling, Mr. Flindell; 3, Seedling, Mr. Haines. Seedlings: 1, Mr. Haines; 2, Mr. Haines.

RANUNCULUSES. 1st 12 (seedlings), Mr. Britten; 2d 12 (seedlings), Mr. Mellon. 1st 6, Mr. Phillips; 2d 6 (seedlings), Mr. Mellon.

PANSIES. 1st twenty-four: Mr. W. Earl, with Earl's Zaphara, Thomson's Eclipse, Silverlock's Prince Albert, Angelica, Earl's Maid of Milan, Thomson's Jehu, Imogène, Jupiter, Lady Lucy, Lidyard's Jewess, Earl of Clarendon, Amulet, Earl's Marmion, Thomson's Rufus, Thomson's Launcelot, Mulberry Superb, Cook's Brilliant, Lovely Bride, and six

seedlings. 2d twenty-four: Mr. T. Mellon, with Miracle, Imogene, Eclipse, Paul Pry, Model of Perfection, Jewess, Doctor Lindley, Duke of Wellington, Mellon's Giant's Bride, ditto Antagonist, ditto Argus, ditto Juliet, ditto Flora Major, ditto Model, ditto Mdlle. Celeste, ditto Uncas, ditto Garrick, and seven seedlings. 1st twelve: Mr. Earl, with Hope, Imogene, Lidyard's Jewess, Victoria splendens, Jupiter, Thomson's Jehu, Earl's Maid of Milan, Earl's Marmion, Angelica, and three seedlings. 2d twelve: Mr. Mellon, with Thomson's Eclipse, May's Imogene, Paul Pry, Model of Perfection, Jewess, Dr. Lindley, Mellon's Giant's Bride, ditto Napoleon, ditto Antagonist, ditto Model, and two seedlings. Seedlings: 1, Mr. Earl; 2, Mr. Earl.

Orchidea. 1, Oncidium altissimum, A. Kenrick, esq., (Gr. R. Gallier); 2, O. flexuosum, A. Kenrick, esq.; 3, Ærides odorata, A. Kenrick, esq.

Stove Plants. 1, Epiphyllum erice, Mr. Moore: 2, Euphorbia splendens, Messrs. Pope and Sons; 3, Gloxinia rubra, John Gough, esq.

Greenhouse Plants. 1, Pimelea decussata, J. Gough, esq.; 2, Fuchsia corymbiflora, Mr. M. Kellet; 3, Nerium Oleander splendens, A. Kenrick, esq.

Ericas. 1, Ampullacea, Mr. Coudrey; 2, Tricolor, Messrs. Pope and Sons; 3, Fulgida, Mr. Moore.

Geraniums. 1, Sylph, Mr. Coudrey; 2, Victory, A. Kenrick, esq.; 3, Foster's Rosea, A. Kenrick, esq.

Roses in Pots. 1, White Moss, Mr. Belliss; 2, Waterloo, Mr. Moore; 3, Fairy Rose, J. Gough, esq.

Calceolarias. 1, Seedling, A. Kenrick, esq.; 2, Seedling, Josiah Mason, esq. (Gr. W. Mussell); 3, Lady of the Lake, Mr. Kellett.

Hardy Shrubs. 1, Parnettia zarbentia, Messrs. Pope and Sons; 2, Kalmia latifolia, Miss Bellamy; 3, Genista tinctoria, Mr. Moore.

Herbaceous or Frame Plants. 1, Verbena Phillipsii, J. Gough, esq.; 2, Gladiolus Colvillii, Mr. Moore; 3, Campanula macrantha, Mr. Moore.

Best Eight Greenhouse Plants. Prostanthera lasianthos, Tweedia cœrulea, Statice sinuata, Alstræmeria pelegrina, Stylidium graminifolium, Pimelea decussata, Xanthosia rotundifolia, and Lilium eximium, Messrs. Pope and Sons.

Best Eight Stove Plants. Ipomœa Learii, Musa coccinea, Aphelandra cristata, Hibiscus Rosa-sinensis, Justicia bicolor, Manettia cordata, Thunbergia aurantiaca, and Vinca rosea, J. Mason, esq.

Best Six Cut Roses. Mr. Joseph Cole, Rugby.

Sweepstakes for Pot Roses. 1, Mr. Edwin Phillips; 2, Messrs. Pope and Sons.

Sweepstakes of Three Pansies. Messrs. Pope and Sons.

Honorary Prizes. James Upfill, esq. for Pope's Seedling Fuchsia; Mr. Kellett, for Fuchsia Chandlerii; and Mr. Kellett, for Fuchsia Standishii.

Cottagers' Prizes. George Brittle, Nosegay, Pansies; Brown, for laced Pink, and plain Pink; and John Faux, for Pansies.

MIDLAND COUNTIES FLORIST'S SOCIETY. 22d June.

PINKS. Purple Laced: Premier, Duke of St. Albans, Mr. Wood; 1, Benjamin, Mr. Wood; 2, Fearnought, Mr. Wood; 3, Kearsley's Black Prince, Mr. Wood; 4, Duke of Devonshire, Mr. Hudson; 5, Unknown, Mr. Lee; 6, Fearnought, Mr. Wood. Red Laced: Premier, Criterion, Mr. Hudson; 1, Duchess of Kent, Mr. Wood; 2, Lady Parry, Mr. Wood; 3, Miss Morris, Mr. Wood; 4, Duchess of Kent, Mr. Wood; 5, Rosabel, Mr. Wood; 6, Coronation, Mr. Wood. Black and White: Premier, Parry's Union, Mr. Wood; 1, Parry's Union, Mr. Wood; 2, Sovereign, Mr. Hudson; 3, Transparent Nova, Mr. Hudson; 4, Unknown, Mr. Lee; 5, White Mountain, Mr. Wood; 6, Lady Bold Houghton, Mr. Hudson.

PANSIES. First Class, Belted: Premier, Coronation, Mr. Frearson; 1, Henchman's Victory, Mr. Wood; 2, Coronation, Mr. Gibbens; 3, Seedling, Mr. Norton; 4, Seedling, Mr. Norton; 5, Competitor, Mr. Frearson; 6, Miss Stainforth, Mr. Gibbens. Second Class, Solid Eye: Premier, Magnet, Mr. Frearson; 1, Magnet, Mr. Frearson; 2, Seedling, Mr. Norton; 3, Governess, Mr. Gibbens; 4, Seedling, Mr. Norton; 5, Lane's Sylph, Mr. Wood; 6, Seedling, Mr. Norton. Third Class, Feathered Eye: Premier, Thompson's Eclipse, Mr. Wood; 1, La Supreme, Mr. Wood; 2, Rival Yellow, Mr. Gibbens; 3, Imogene, Mr. Gibbens; 4, Yellow Superb, Mr. Gibbens; 5, Agnes, Mr. Gibbens; 6, Seedling, Mr. Wood; Fourth Class, Selfs: Premier, Black Diamond, Mr. Frearson; 1, Ann, Mr. Gibbens; 2, Queen of Scots, Mr. Gibbens, 3, Seedling, Mr. Frearson; 4, Argo, Mr. Wood; 5, Canary, Mr. Gibbens; 6, Seedling, Mr. Frearson.

ROSES. First Class, Moss: Premier, Moss Provence, Mr. Wood; 1, Moss Provence, Mr. Gibbens; 2, Crimson, Mr. Wood; 3. De Meaux, Mr. Wood; 4, Crested, Mr. Gibbens; 5, Perpetual, Mr. W. Cooke; 6, Eclatante, Mr. Cooke. Second Class, Bourbons: Premier, Agustine Lelieur, Mr. Cooke; 1, Armosa, Mr. Cooke; 2, Celimene, Mr. Cooke; 3, Julie de Lyons, Mr. Cooke; 4, Phillipart, Mr. Cooke; 5, Madame D'Esprez, Mr. Gibbens; 6, Queen, Mr. Gibbens. Third Class, Hybrid China: Premier, Lilac Queen, Mr. Cooke; 1, Catel; Mr. Gibbens; 2, Coccinea Superba, Mr. Gibbens; 3, Richelieu, Mr. Cooke; 4, Duke of Devonshire, Mr. Cooke; 5, George the Fourth, Mr. Gibbens; 6, Belle Parabere, Mr. Pickering. Fourth Class, Alba: Premier, Comtesse de Lacepede, Mr. Gibbens; 1, Theresa, Mr. Cooke; 2, Josephine Beauharnois, Mr. Gibbens; 3, Royal Blush, Mr. Gibbens; 4, Duc d'Anjou, Mr. Cooke; 5, Marianne, Mr. Gibbens; 6, General Blucher, Mr. Gibbens.

RANUNCULUSES. Best Collection, Mr. William Lee; best pan of six, Naxara, Julius, Orissa, Princess of Wales, Socrates, and Virgaloose, Mr. Pickering. Second: Naxara, Beroth, Œil Noir, Thompson's Queen, Nova, and Temeraire, Mr. W. Lee.



ACHIMENES LONGIFLORA.

THE

# FLORIST'S JOURNAL.

SEPTEMBER 1, 1842.

## THE CULTURE OF ACHIMENES,

WITH AN ENGRAVING OF A. LONGIFLORA.

IT is not often we have the opportunity of noticing a more beautiful plant than the one now before us, and we think the Horticultural Society of London extremely fortunate in being able to claim the enviable distinction of having introduced it. So fine a flower, and to be had for so little trouble, is not often among the recommendations of our new importations. This plant is native to the equinoctial parts of America, and more particularly Guatemala, from whence it was sent by that indefatigable collector Mr. Hartweg, in 1841; it was grown and flowered in the autumn of last year at the Society's gardens, and from the ease with which it is increased, soon found its way into the collections of most good cultivators. Before proceeding with the management of this genus, it will be as well to explain the reason of the alteration in its appellation. It appears from Dr. Lindley, that the present name *Achimenes* is the original one given to the genus by Dr. Patrick Browne in his History of Jamaica, which then consisted of two species, one of which, *coccinea*, has long been a favorite inhabitant of our gardens. Some time after L'Heritier chose to alter the name, but without any apparent sufficient reason and called it *Cyrilla pulchella*, under which name it has long been familiar to almost every cultivator, but as it was eventually found to be very different from a genus already so called, (the Cyrilla of Linnæus an eri-

caceous plant,) that name was subsequently altered again, and *Triverana* substituted by Willdenow, and just as this last is becoming familiar to us, by a sudden retrograde thought of M. Aug. Pyr. de Candolle, following perhaps Persoon and Nees von Esenbeck, we are at once carried back again to the old *Achimenes*. How long it will last under the present denomination we cannot pretend to determine, but we must warmly and strongly protest against these feats of legerdemain in our botanic nomenclature. Dr. Lindley says he thinks it would have been far better to have retained the name Triverana, in which opinion we perfectly concur; but thinking so, he should have strenuously resisted the innovation when naming the present species; nor do we think the reason assigned sufficiently cogent to excuse him, although it had taken place in the Prodromus of De Candolle, we certainly think the inconvenience to cultivators occasioned by the return to the old name of much greater magnitude than could have arisen to systematists, by retaining the one then in most general use; as it is, we have the old Achimenes, alias Cyrilla, alias Triverana, at once and like an honest genus, throw off all its aliases and appear again under its old cognomen; really this seems to partake too much of anything rather than a *regular* system.

The cultivation of these plants is of the easiest possible description wherever the requisite accommodation can be afforded them; their roots consist of a number of small imbricated tubers, each one if detached produces an entire and perfect plant; knowing this, the cultivator has but little trouble in the propagation of his plant. During the winter these tubers require to be kept perfectly dry and dormant; it is on the proper hybernation of these roots that the bloom of the succeeding year depends, and as this period is just commencing we will adapt our remarks to it first. It must be understood the roots are not to be dried so thoroughly as is necessary with larger roots of the same description or habit, as if so treated, the vitality of the tuber is materially affected, and the flowering consequently weakened; we have seen them taken from the mould, and after being dried, we might say scorched, in the sun, have been wrapped in paper and kept through the winter as is prac-

tised with seeds. This is not right, these roots when planted were much longer before they could be excited to grow than was proper, and several of them rotted entirely, owing to the sudden change of situation and great accumulation of moisture. When the plants cease to grow, water should be gradually withheld, until the earth about them is perfectly dry; they should then be placed on an elevated shelf in a light part of the greenhouse free from damp; they should be allowed so to remain till the following spring, taking care in the meantime that no occasional drip falls into them; if any danger is apprehended from such causes, the pots should be placed on their sides, but not covered with another as is sometimes recommended, as in this case the air about them becomes confined, and mouldiness ensues.

In the following spring about the end of February, the roots should be shaken from the earth and separated; if a great increase is desired they may be planted singly, or if a sufficient quantity is already obtained, three or four may be placed in each pot. The soil should be a mixture of well-decayed leaf-mould, and peat or bog mould, and a small proportion of fine sand and light turfy loam; these several soils should be well mixed together, and the coarser lumps broken with the hand; but it is better not sieved unless very rough indeed. The pots used for the first potting should be those generally called 48s if three roots are placed in each; if planted separately, something smaller may be used; they should be perfectly clean and dry, or the peaty soil soon adheres to them and forms an obstruction to the passage of the water: this is one very fertile cause of damping among plants. Efficient drainage must also be secured: the best method for these plants is to place several small pieces of sherds loosely over the bottom of the pot, and over them a piece of sphagnum or moss; this allows a complete passage for the water, and afterwards the fibrous roots of the plants fasten among it and so derive much nourishment, it also accelerates their removal when repotted. When the plants have attained about two inches growth, they should be removed into larger pots proportionate to their strength. It should be particularly observed during the whole period of growth that the too frequent application of water is injurious; a rather shaded situation should be chosen for them, which will preclude the neces-

sity of applying it too often, or in too great quantities; in this place they should remain till they show signs of flowering, when a more open aspect is necessary. Another very desirable method of growing them, instead of using the large pots just mentioned, is to place the roots when removed from the small pots, into wooden boxes of suitable sizes: this is particularly suited for A. longiflora, and A. rosea; as from a paucity of lateral branches they sometimes present a naked appearance when grown in pots, but much of this depends on the management. If the plants are broken into a vigorous growth and kept in a healthy condition, there will not be much want of foliage or branches. We should have before remarked a higher temperature is necessary when the roots are first started, than is required in the after growth. About 60° should be the mean of the temperature employed for the first exciting, which may be continued till the plants have become reestablished after the second potting, when a considerable reduction should take place, about 45° is then sufficient; the temperature of a common greenhouse, or even a cold frame or pit is quite sufficient; under this treatment the plants assume a more densely compact habit, and the flowering is far more abundant and vivid than would follow if continued at a higher temperature. When the blossoms are fully expanded, the plants may be placed in any desired place they are intended to ornament, even in the open air, and as this dies off, the plants must be gradually dried and brought again under the winter treatment, as described at the beginning of this paper.

The genus at present consists of four species: A. coccinea, an old and well-known favorite with brilliant scarlet flowers; A. longiflora, our present subject; A. rosea, a new species resembling coccinea in habit, with pale rose-coloured flowers, imported at the same time with longiflora; and A. pedunculata, of much taller and stronger habit, also introduced with the two last mentioned: this plant at first sight appears more like a Gesneria both in its growth and the manner in which the flowers are produced, which are red; the same treatment applies to them all.

Our specimen was kindly furnished by Mr. Mountjoy, of Ealing. EDITOR.

## ON FORCING ROSES.

TO THE EDITOR OF THE FLORIST'S JOURNAL.

SIR,—As some of your readers may be amateurs who, like myself, are desirous of embellishing their greenhouses in the early part of the year, a time when any flower is acceptable, and who may also resemble me in being their own gardener, I am induced to offer you the following remarks on the preparation and forcing of the rose, a flower which even in June never fails of admirers; but when seen amid the frost and cold of the early spring, is in my opinion quite without a rival.

I must preface my remarks by informing you I have a rather small greenhouse in which I keep a miscellaneous collection of plants, and at one end a part of it partitioned off, which I keep rather warmer, and use it for forcing plants and roots for early flowering. In it I have a small bark bed, which I find extremely handy, and in this little place I am able to force a few plants, such as acacias, azaleas, kalmias, lilacs, roses, &c., together with hyacinths, tulips, and other roots, and also to raise tender seeds. I mention this to show you how much may be done in a small place, if proper judgment is used. But to proceed with my method of forcing roses. It must be previously understood that all roses require to be at least one year in pots previous to their being forced, and as the season is just at hand, I would advise all those who have the means, to pot as many as they can accommodate. The best kinds for forcing are the Common and Moss Provence, (all the moss roses are more or less beautiful,) the Four Seasons, and the Rose de Roi, I particularly select these for their fragrance, but most of the China roses may be had in flower through the spring for very little trouble, but they are rather deficient in scent. Having selected good strong dwarf plants of the above kinds, I pot them into large pots, that is such as will hold them conveniently without confining the roots too much; I use rich loam lightened with a little leaf-mould for potting, this I do as soon as the foliage is off the plants, pruning them in rather close at the same time; I then plunge them in old tan or ashes, and let them remain till the following autumn, when I again prune them, though not so

close as before; observing to pinch off all flower buds that may be produced in the previous summer; the plants after being pruned are top-dressed, and about the beginning of November I place them in a cold frame plunging them as before, and as the winter advances and the cold increases, I sometimes throw a mat over the lights of the frame when a very cold night is expected. By the middle of January I usually place half my rose plants in the little stove before mentioned, (for so I dignify it,) as soon as I get them in I water the whole of them with strong lime water, to remove the worms which may be in the pots, for I find if these are allowed to remain they are very injurious as well as unsightly; the plants are then frequently syringed, and water given as they seem to require it. It is not long before the foliage appears, when I increase the syringing; this is very beneficial as it keeps them clean and prevents the lodgment of insects: the water used is always of the temperature of the house, the heat of which when the plants are first introduced is about 50°, and as their growth advances, I endeavour to raise to 60° in which I usually bloom them. At the time the buds are forming they require to be constantly examined to detect that detestable destroyer "the worm i' the bud," which if not destroyed will speedily frustrate the cultivator's hopes; there is no way of preventing their ravages that I am acquainted with, but by constant watching to pick them out. As the flowers on the plants begin to expand they should be supported with sticks, and air admitted to the house on every favorable opportunity; the syringing I continue up to this time, but it cannot be applied after, as the blooms would be spoiled by the water; when fully blown they are beautiful ornaments of the drawing-room, and in a cool situation continue good a long time; when completely over, if the plants are required again I remove them to a sheltered part of the garden, or a cold frame if I have room, but more often throw them away entirely, as I greatly prefer new plants; and for this reason pot as many as I think I shall require annually; if they are forced a second time they require two years to recover strength sufficient. These are the principal outlines of the method I employ, and with them am generally successful.

F. W. C. FLETCHER.

## THE GRAFTING OF CAMELLIAS.

Dear Sir,—In answer to your correspondent Amicus, I beg to say, Camellias may be grafted with safety all the year round, providing you can command two requisites; the one, a genial warmth (a strong heat not being necessary) of not less than 55° Fahrenheit, the other, free juicy stocks in a growing state which will throw out sap upon being cut, and in which the bark will separate freely from the wood; having these requisites you may do anything with Camellias in the way of grafting or budding; without them, all the art in the world will not produce success. Having laid down these general rules, I will proceed to describe the method I use, in which I by no means recommend a servile following to ensure success, but let any one follow that plan which his own experience and knowledge in vegetable physiology deems most convenient, keeping the above principles in view.

For winter and early spring grafting I select for scions healthy second or autumn shoots of the preceding year's growth, which will be just ripe. My stocks having been shifted in September, and excited by three or four weeks' mild forcing, immediately previous to grafting, will be just rooting so as to show their noses to the edge of the pot (if I may be allowed the plainest expression I can use). If I find they do not all run (a professional phrase for the bark rising clear from the alburnum), I select the most likely first, and make an incision in each before using them, as if for the insertion of a bud, on any part of the stem above, where I intend to graft them, merely to try if the bark will rise, if it will not, I put them back for a few days until the bark will separate easily. Those which are ready I cut down to a leaf or shoot on a clean part of the stem. I then cut through the back down in a vertical direction, and insert the graft between the bark and the alburnum. I then bind them round with a thin strip of bass, or any other weak substance, which will burst as the graft swells, (I do not hold with twine or worsted, which requires cutting away.) I then plunge

them in a tan bed, and keep them close and moist. By the middle of April I have ripe shoots (forced early) for scions of the same year's growth. With these I go on in succession and continue grafting throughout the summer: but for those who have not a large quantity to do, I would recommend August as the best time for the operation, taking care to have the stocks shifted about two months before they are used. Having kept them close after grafting for about six weeks or two months, they will begin to swell and burst the cerements with which they are bound; they may then be considered as fairly united, but should be kept in a close frame or pit throughout the summer.

In the choice of scions I would recommend particular attention to the young shoot when first formed, and before the leaves are quite expanded, for the following reason, which, as I have never seen noticed before, I do not know whether it has ever been observed or had that attention paid to it which I consider it deserves. It is well known that camellias often run from their colours, for instance a plant, of a variety which should be blotched with white on a crimson or scarlet ground, such as the old double variegated, Chandlerii, or Corallina, may often be seen entirely red, or perhaps one shoot will bear red flowers and the rest of the tree will have them blotched, and these properties or peculiar modes are entailed by grafting; for instance a graft from a branch bearing red flowers will produce a tree having the same tendency, at any rate, probably for some years successively. It then becomes a desideratum to judge what shoots should be selected for producing flowers having the desired colours in best perfection. Shall I be considered visionary if I assert that rules may be laid down whereby we may judge from the appearance of the foliage of a plant or even shoot what will be the colour of the flowers? My own experience leads me to judge that such is the case. To explain my meaning let me lead my reader to a plant of C. tricolor, or any other strongly marked variety, and let him take a shoot just expanding, the leaves of which are about half grown; if he examines the leaves he will observe what at first appears faint lines of red intersecting the brighter green of the leaf; by a closer observation he will see there are two shades of red; he

may then, by a very easy effort of the mind, change the light green into white, the reds into crimson and rose, and he will then have the exact stripings of the petal of the flower; in another week these stripes will have entirely vanished and given place to a uniform deep green colour. From tricolor he may go to the more delicately striped kinds, such as Sweetii, Colvillii, Eclipse, Campbellii, Juliani, &c., he will still observe the markings of the flower either in broad flakes or narrow stripes delicately dashed or deeply dyed, but exactly as they appear in the petal of each peculiar variety; and the clearer the white of the petal the brighter and lighter will be the corresponding green of the leaf. He may then go to the self-coloured varieties; he will there see the leaf suffused with a deep crimson, or delicate blush, or bright rose, as the case of the flower may be; but here it will require longer practice to form a correct judgment, the colour being so blended with the green; but I have no doubt that close observation will soon detect rules for forming a judgment upon which to rely. I do not mean to assert positively that the markings of the individual leaf will correspond with those afterwards developed by the flower bud at its axis, should one be formed; I only state what, from the observations I have yet made, I have found to be general rules, and beg strongly to recommend the observations to be closely followed. In my judgment of the colour of seedlings before they have flowered, I have found myself very correct with the colours of those which have afterwards developed themselves. It however requires long and close observation, extensive comparison, and strict consideration of external causes, such as soil, shade, sun, &c., before one can identify the peculiar shade in the leaf, with the corresponding colour of the petal. I do not pretend myself anything like perfect certainty; but, from the observations I have made, I believe it may be attained.

J. Halley.

*Blackheath.*

## LIST OF NEW PLANTS.

Gynandria Monandria—Orchidaceæ.

*Aerides Brookii.* An extremely beautiful epiphyte of vigorous habit, producing a long and tortuous stem with luxuriant leaves, on which are singular patches of a decidedly glaucous nature. The raceme of flowers issues from near the top of the stem, and is from a foot to eighteen inches long, drooping and bearing several side branches; flowers white and deep pink or pale purple, very numerous and delightfully fragrant, and they last for an extraordinary long time. For cultivating this charming plant, a block of wood to which it can be attached should be chosen, or it should be planted in sphagnum moss in an open wooden basket, in either case it must be suspended from the roof of a warm orchidaceous house, and placed near the sources of atmospheric moisture in summer. It must be watered assiduously during the summer months, and kept rather dry in winter.—*Pax. Mag. Bot.*

Didynamia Angiospermia—Scrophulariaceæ.

*Mimulus Maclainianus.* A very showy hybrid Mimulus, with the habit of M. cardinalis; the flowers are crimson with an extremely dark rich throat. It appears to have been raised by Mr. Maclain, Florist of Harold's Cross, near Dublin, and to have been named after this person by Sir W. J. Hooker. It requires to be grown in a pot of rich loamy soil, and to be liberally watered during the season of its growth; the general treatment of M. cardinalis will most probably suit it.—*Pax. Mag. Bot.*

Decandria Monogynia—Leguminosæ.

*Oxylobium Pulteneæ.* A native of New Holland, not exactly a new species, having been brought from thence in 1824, but still scarce; the plant is a dwarf branching greenhouse shrub, producing lively orange-coloured blossoms in bunches from all parts of the stem, each of which is crowned with a large and dense cone of inflorescence. This is decidedly one of those

plants that need a little care in their cultivation, and which will reward the grower for any trouble he may expend upon them. If potted carelessly, placed in a situation where other plants too closely surround it, and not further regarded, it will grow up straggling and unsightly, and apparently deserve only to be discarded: but when it is properly potted in a compost of light loam and heath mould, mixed with a small quantity of finely broken stones or bricks, and allowed plenty of light and air; stopping the shoots now and then to render them dwarf and bushy, it will take a totally different aspect, some care is additionally requisite in watering the plant, having rather small and scanty foliage, its roots are more exposed to the influence of the sun than those of many similar shrubs. It must therefore be watched lest the soil become hardened in the centre, fall away from the sides of the pot, and thus allow a passage of water round the edges, without even admitting it into the mass. Still the poverty of its leaves should not be made a pretext for saturating it with fluid, because this very fact renders evaporation less abundant. Cuttings root under a shaded bell-glass in sandy soil, with a trifling bottom heat.—*Pax. Mag. Bot.*

Didynamia Angiospermia—Gesneraceæ.

*Achimenes Longiflora.* See our first article and illustration.

Hexandria Monogynia—Amaryllideæ.

*Alstrœmeria Nemorosa.* A native of the Organ Mountains, first flowered in the winter of 1841-2, in the greenhouse of Messrs. Veitch and Son, of Exeter, nearly related to A. aurea, and requiring the same treatment.—*Curtis's Bot. Mag.*

Pentandria Monogynia—Primulaceæ.

*Primula Denticulata.* Another of the many interesting plants introduced by the Messrs. Veitch. The seeds were received from the North of India, it being a native of the mountains bordering on Silhet and of Nepal; the flowers are pale purple, and the tube and mouth yellow; it has been hitherto flowered in the greenhouse, but will probably prove hardy.—*Bot. Mag.*

Gynandria Monandria—Orchideæ.

*Aspasia Epidendroides.* A fine orchidaceous plant, with the habit of an Epidendron, a native of Panama and Columbia, also of Guatemala, requiring the usual treatment of epidendron.—*Bot. Mag.*

*Arundina Densa.* Another beautiful orchidaceous plant, with somewhat the habit of a Phaius, and flowers similar to some of the smaller Cattleyas; each flower is about three inches in width; the sepals are pale purple, the lip being yellow and red, the petals are rosy purple, and the labellum reddish purple, with yellow veins on a white ground; altogether the flowers are very handsome and delightfully fragrant.—*Bot. Reg.*

Icosandria Monogynia—Philadelphaceæ.

*Philadelphus Mexicanus.* A very singular species, the smallest of all the Syringas known to us, not growing above two feet in height: the plant is a sub-evergreen, and very nearly hardy, the flowers are large, solitary, pure white, resembling a small single rose; it is said to have "the merit of being an excellent plant for forcing." It is a native of Mexico, being found by Mr. Hartweg at the Hacienda del Carmen, from whence he sent it to the Horticultural Society.—*Bot. Reg.*

Monadelphia Triandria—Iridaceæ.

*Hydrotænia Meleagris.* A most curiously coloured flower on a plant having the appearance of a Fritillaria. Its appearance is by no means attractive, but the interior of the flower when carefully examined will be found to exhibit beauties of no common kind. The curious watery band which glitters as if covered with dew, or as if constructed out of broken rock crystal, is one of the most curious objects known. The stigmata too are extremely remarkable, each divides into two arms which are rolled up as if forming a gutter, with a dense mass of bright papillæ at the end, and a single tooth on the inner edge; between the arms stands a short mucro, which is free from glands, and forms a minute horn. The colours of the flowers are shades of purple lilac, yellow, white, blue, and blush; each blossom is about an

inch and a half across. The plant requires the usual treatment of Tigridia and other greenhouse bulbs.—*Bot. Reg.*

Pentandria Monogynia—Solaneæ.

*Solanum Balbisii var. Bipinnata.* By no means an ornamental plant: the flowers are produced on large upright racemes of a lilac colour, and but little superior to the common potatoe. A native of Buenos Ayres; will grow readily in a stove or warm greenhouse. The plant is extremely variable both in the foliage and the colour of the flowers.—*Bot. Mag.*

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## THE FLORIST'S LETTER-BOX.

### TO CORRESPONDENTS.

J. S. Worcester.—Of the Picottees sent only two are worth preserving: No. 9, to be called Diogenes, heavy-edged scarlet, is a good broad petal, but, like a great many others of the same class, rather loose. No. 15, not named, yellow, decidedly a good flower. Keep it by all means.

Tyro.—Yes; pot them at once. See Calendar.

Intruder—is by no means intrusive. The flower buds of your Dahlias should be thinned where too numerous, and the blooms intended for exhibition protected in small wooden boxes about eight inches square in the inside, with a glass front and a sliding back, which slide should have a slit in it to admit the stem of the flower. When the latter is placed in the box and the slide shut, the crevices round the stem should be filled with wool or cotton dipped in oil; this effectually precludes the approach of earwigs or other insects. The box itself should be supported by a strong stake driven into the ground, to which one side of the box is previously nailed. Under such circumstances, two or three days is generally sufficient to bring the flower to perfection.

M. P. B. Monk Wearmouth.—Greenhouse plants require an average temperature of 45° during the winter. The house being light and airy is a great advantage, but you do not state what

means you have of obtaining artificial heat when required; this should be provided for. A covering of mats may suffice if the plants are not very delicate. Any further particulars our Calendar will generally supply, if not, write again. We do not recommend any of the nostrums about which so much is *said*.

AMICUS. We forwarded your question to Mr. Hally, who has obligingly sent us the particulars of his practice, which you will find inserted at full length.

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## CALENDAR FOR SEPTEMBER.

STOVE. Immediate attention should be paid to the arranging the plants for the winter, if not already done, as we advised last month; and having properly settled them in their respective places, previous to which all repotting should have been completed, preparations should be made to bring them into a fit state to pass through the winter with safety: the most essential point is the proper ripening of all the parts of the plant intended to be preserved; as a means of effecting this, the greatest possible quantity of light and air on every favorable occasion should be allowed them, and water given but sparingly. We may here observe that all plants requiring a state of perfect rest during the winter never require repotting at this season, as the fresh soil would induce a fresh growth, and continual excitement indisposes all plants to flower, we may mention Amaryllis, Gloxinias, Gesnerias, and most other bulbous-rooted plants, as coming immediately within our meaning. On fine mornings, when an opportunity is likely of giving air, some of the large leaved plants may be gently syringed, but it must not be used indiscriminately. In the routine culture, attention must be directed to the suppression of insects, as they are more easily eradicated in their earlier stages than when established. Prune and tie up climbers and other plants that require it; give a full supply of air on every fine day: if fire heat become necessary by the end of the month, the paths of the house may be watered occasionally, though a dry atmosphere is preferable now, as it enables the plants to go through the winter in a much lower temperature.

GREENHOUSE. Repotting should be proceeded with, with all expedition, and all repairs completed without delay, as it is a very erroneous impression that plants are benefited by a late exposure, for usually, at the end of the present month, we have either wet or cold weather and either of which is equally injurious; therefore we advise that every plant of value be got in by the middle or certainly not later than the end of the month. Those plants but recently potted should be sparingly watered, and if worms are supposed to be in the soil, water them with lime water. Dry off Alstrœmerias, Tropæolums, &c.; be particularly careful to destroy all insects before the plants are brought in; the house also should be thoroughly washed and cleansed; cuttings may still be taken of desirable plants for early transplanting next season, though it had better be done at once; seedlings and small plants should be placed near the glass; give abundance of air both day and night, and but little water. Cacti should be placed in the lightest part of the house, and their new shoots trained in a circular manner or bent downwards; this induces them to flower freely.

FLOWER GARDEN. Dahlias are now advancing to perfection; keep them constantly secured to stakes, or a strong wind may in an hour destroy the finest; thin out the flower buds where too numerous, and protect the finest flowers from wet and insects; a sharp watch must be kept on earwigs and caterpillars; see that they are all rightly named: if the weather is dry, mulching should be increased round their stems; take up and pot layers of Carnations, Picottees, &c. that are rooted; pinks and pansies may be planted, as we recommended last month; sow and transplant herbaceous Perennials. Tie up Chrysanthemums, and if any require repotting, it should be done immediately; they require a liberal supply of water, and every other time manure water should be used. Auriculas should be constantly looked over; keep them free of dead leaves and insects, and give them but little water; the lights should be kept off day and night, except in case of heavy rain. Prepare beds for planting Hyacinths, Tulips, Anemones, &c.; Hyacinths, &c. for early forcing should be potted immediately. Take up

layers of Verbenas that are rooted; pot them, and place them in a close frame for a few days; these make good plants for next year. Gather seeds of Annuals and Perennials, but let them be perfectly ripe and dry. Cut down and remove all dead and decaying stems; keep the beds and borders clean and neat; plant box edgings. The frames for the protection of half-hardy plants during winter should now be got ready; a thick stratum of shingle or ashes should be laid at the bottom to keep the pots dry, and prevent the ingress of worms, and if wet weather occurs, the plants should be placed in them, keeping them in as small pots as possible; all straggling growths should be removed by pinching their tops off; if it becomes necessary to place them in the frames this month, all the air possible should be given them by tilting up the lights in wet weather, and removing them altogether when fine. Pot off Annuals sown last month for winter flowering, and sow a few more; this is the best time to sow Rhodanthe Manglesii and Lisianthus Russellianus for flowering next year; cuttings of China Roses that are struck should be potted and placed in a cold frame, and more may be taken and placed under a handglass. Mow the lawns frequently, and keep the walks free from weeds.

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## FLORICULTURAL INTELLIGENCE.

THANET FLORICULTURAL AND HORTICULTURAL SOCIETY. The first show since the establishment of this Society was held in the Ranelagh Gardens, St. Peters, on Thursday, July 14.

Best Miscellaneous Collection of PLANTS in POTS..£10 Mr. W. Miller.

Best Miscellaneous Collection of PLANTS in POTS (not less than 12): Salvia patens, Mesembryanthemum alba, Mimulus moschata, Cytisus racemiflora, Thunbergia aurantiaca, Fuchsia conspicua, F. magnifica, F. variegata, Loasa aurantiaca, Hoya carnosa, Pelargonium victory, P. Louis dix-huit, P. Lounde's perfection, T. N. Harris, Esq.

Best Single specimen, Orange tree, Sir Richard Burton. Second best ditto, Fuchsia corymbiflora, J. B. Judge, Esq.

Best 3 GERANIUMS: Joan of Arc, Orange Boven, Maria, T. N. Harris, Esq. Second best, 3 ditto: Vulcan, Lord Mayor, Matilda, Rev. J. G. Hodgson. Third best, 3 ditto, D. Hooper, Esq. Best Single ditto, Leila, Rev. J. G. Hodgson.

Best 3 HERBACEOUS CALCEOLARIAS: Royal Standard and 2 Seedlings, Rev. J. G. Hodgson.

Best 3 BALSAMS, L. C. Humfrey, Esq. Second best 3 ditto, L. C. Humfrey, Esq.

Best 3 COCKSCOMBS, L. C. Humfrey, Esq.

Best 6 GERMAN STOCKS, Rev. J. G. Hodgson. Best 3 ditto, Rev. J. Hodgson.

Best CLIMBING PLANT, Thunbergia aurantiaca, T. N. Harris, Esq.

Best 3 FUCHSIAS (not named), J. P. Powell, Esq.

*Cut Flowers.*

Best 6 GERANIUMS: Erectum, Jewess, Alicia, Sylph, Comte de Paris, Masterpiece, Capt. Isacke. Second best 6 ditto: Gains's King, Maria, Sylph, Masterpiece, Victory, Jewess—Rev. J. G. Hodgson.

Best 12 PANSIES: Dr. Johnson, Cooke's Perfection, Cooke's Prince Albert, Cooke's Ovid, Cooke's Royal Standard, Delicata, Jehu, Sylvia, Curion, Cream superb, Marchioness of Anglesea, Beauty of Hitchin—Rev. J. G. Hodgson. Second best 12 ditto: Victory, Robin Adair, Ovid, Royal Standard, Dr. Johnson, Beauty of Hitchin, Azurea, Jehu, Delicata, Tippoo Saib, Peter Dick, Yellow Defiance—Rev. J. G. Hodgson.

Best 6 CARNATIONS: Elizabeth, Puxley's Prince Albert, Wakefield's Lady C. Lyster, Lydia, Wilson's Harriet, Christian's Excellent—Rev. J. G. Hodgson.

Best 6 PICOTTEES: Gidden's Teaser, ditto, Wood's Victoria, Queen of England, ditto, Vesuvius—Rev. J. G. Hodgson.

Best 12 PERENNIALS: Veronica glabra, Pyrethrum flore pleno, Potentilla, O'Brienna, Symphitum asperrimum hybridum, Campanula flore alba pleno, Campanula flore pleno, Potentilla multidenta, Veronica alba, Antirrhinum flore pleno, Antirrhinum coccinea—J. Slater, Esq.

Best 12 ANNUALS, Hon. Mrs. Hodgson.

Best Bouquet of FORCED and HARDY FLOWERS, L. C. Humfrey Esq.

Best Bouquet of HARDY FLOWERS only, L. C. Humfrey, Esq.

Best FLORAL DEVICE, Capt. Isacke. Second best ditto, Basket, Mrs. Millner.

*Extra.*

Three GERANIUMS: Prima Donna, Erectum, Beauty, T. N. Harris, Esq.

Three FUCHSIAS: Corymbiflora, Youellii, Chandlerii, J. B. Judge, Esq. Single ditto, Gracilis, Sir Richard Burton.

A FLORAL DEVICE, Basket, L. C. Humfrey, Esq.

PANSIES were exhibited by Mr. Boys, and a fine collection of CARNATIONS and PICOTTEES by Mr. Wilmer, Florist, of Sunbury.

The collections of Plants were numerous, and included a number of very rare and unusual kinds; there was, however, but one competitor (Mr. Miller, of Ramsgate,) for the £10 prize, and his collection consisted almost entirely of fine specimens of the more recently raised Pelargoniums

and Fuchsias. Mr. Masters, of Canterbury, sent a large collection of rare plants, including a noble specimen of Sabal Blackburniana, Araucaria excelsa. The chief features of this collection consisted in a series of Orchidaceous plants, another of Succulents, and a third of plants used in domestic economy and the arts; the most extraordinary plant in the first series was the Oncidium papilio; near this stood Oncidium flexuosum; also two varieties of Epidendrum cochleatum; among the Succulents we noticed the extraordinary Cereus senilis, a very large specimen of Opuntia monocantha, and several of the globular Cactuses. The most interesting among the Plants used in domestic economy was the Sago palm, Cycas revoluta, with several fine whorls of leaves.

Among the Plants in competition, was an orange tree from Sir R. Burton, covered with fruit, in all stages of maturity, and a noble Fuchsia corymbiflora, nearly 20 feet, from J. B. Judge, Esq., was the admiration of everybody, as well as a handsomely-grown plant of Fuchsia Chandlerii, for which an extra prize was awarded. The Pelargoniums and miscellaneous collection from T. N. Harris, Esq. were examples of good cultivation.

In concluding these hasty remarks, we must congratulate the society on the success of the first show, which passed off in the most satisfactory manner.

FLORICULTURAL SOCIETY. The Show of Picottees and Carnations took place on Tuesday the 19th of July, and was considered by most of the numerous growers present to be the finest of the season. The following were the prizes awarded:

PICOTTEES. Amateur's stand of 12: First, Mr. Barnard, of Brixton, for Brinkler's Purple Perfection, Gidding's Princess Royal, Green's Queen, Gidding's Sir Robert Peel, ditto Albert, Sharpe's Wellington, Waine's Victoria, Mrs. Barnard, Brinkler's Duchess, Crook's Victoria, Well's Lady Flowers, and Wildman's Isabella. Second: Mr. Edmonds, of Clapham, for Princess Royal, Ace of Trumps, Gaines's Queen, Mrs. Veasey, Mason's Charlotte, Queen of England, Teaser, Cornelius, Lady Dover, Invincible, John Perry, and Waine's Victoria. Third: Mr. Headley for Waine's Victoria, Headley's Sarah, Unknown, Brinkler's Lord Althorpe, Green's Victoria, Hector, Invincible, Vespasian, Gem, Tyler's Eliza, Nanette, Criterion, and a Seedling.

CARNATIONS. Amateur's stand of 12: 1st, Mr. Headley, of Cambridge, for Incognito, Wilson's Harriet, Mrs. Betts, Unknown, Ely's Mrs. Barnard, ditto Mrs. Ely, Hero of Middlesex, Leader, Don John, Empress of Purples, William Cobbett, and Queen of Scarlets. 2d, Mr. Bucknell, of Bristol, for Bucknell's Ulysses, Lady Rowley, Puxley's Prince Albert, Franklin's Queen of Hearts, Wilmer's Solander, Brooke's Flora's Garland, Smith's Wellington, Stone's Venus (purple bizarre), Stone's Venus (purple flake), Hero of Middlesex, and Chamber's Kate.

PICOTTEES. Nurserymen's stand of 12: 1st, Mr. Wilmer, of Sunbury, for Wilmer's Prince Royal, ditto Alcemona, ditto Queen, Nulli secundo, Sharpe's Wellington, Green's Queen, Wildman's Isabella, Jessop's Sir W. Middleton, Ward's Sir R. Hussey, Kirkland's Princess Sophia, and Gidding's Miss Desborough. 2d, Mr. Dickson, of Acre lane, for Dickson's Trip to Cambridge, Barnard's Bride, Kirkland's Princess Augusta, Green's Queen, Gidding's Vespasian, Orson's Queen Adelaide, Sharp's Invincible, ditto Duke of Wellington, Brinkler's Purple Perfection, Gidding's Teaser, Annersley's Sampson, and Barnard's Mrs. Barnard.

CARNATIONS. Nurserymen's stand of 12: 1st, Mr. Orson, of Kennington, for Roi de Capuchins, Cartwright's Rainbow, Ely's Mrs. Barnard, ditto Lady Ely, ditto Regulator, Barranger's Fire King, Martin's Phœnix, Knott's Alfred the Great, Roi de Goberts, Turner's Princess Charlotte, Pollitt's Triomph Royal, and Migg's Earl of Leicester. 2d, Mr. Norman, of Woolwich, for Beauty of Woodhouse, Bishop of Gloucester, Manby's Robert Burns, Duke of Rochester, Roi de Capuchins, Wilson's Harriet, Ely's Lady Ely, Prince Albert, Martin's Splendid, Smith's Wellington, Page's Caroline, and Wilmer's Solander. 3, Mr. Wilmer, for Bishop of London, Altenbrooke's Lydia, Wood's William the Fourth, Stony's Duke of York, Seeley's Princess Royal, Hero of Middlesex, Solander, Puxley's Prince Albert, Bate's Wellington, Wilson's Harriet, Green's Sir Robert Peel, and Seedling.

CLASS SHOWING. Prizes of One Guinea each, given by Mr. Headley, of Cambridge: for the best Carnation, Mr. Bucknell; for the best Picottee, Mr. Barnard.

*Prizes given by the Society.*

Best scarlet bizarre CARNATION, Mr. Halliday, for Martin's Splendid.

Best crimson ditto, Mr. Wilmer, for Maudsley's Robert Burns.

Best scarlet flake, Mr. Headley, for Twitchet's Queen of Hearts.

Best purple ditto, Mr. Norman, for Maudsley's Beauty of Woodhouse.

Best rose ditto, Mr. Bates, of Oxford, for Briseus.

PICOTTEES. Best heavy edged red, Mr. Barnard, for Sharp's Wellington. Ditto ditto purple, Mr. Norman, for Kirkland's Princess Augusta.

Best light edged red, Mr. Headley, for Headley's Scarlet. Ditto, ditto, purple, Mr. Headley, for Gidding's Vespasian.

SEEDLINGS. Silver Cup, given by Dr. Lindley, for the best seedling Picottee of the present year, Mr. Neville, of Peckham, called Dr. Lindley.

*Prizes given by the Society for Seedlings of the last or previous years:*

CARNATIONS. 1st Class Prize, Mr. Bates, of Oxford, for Briseus, Seedling of 1840. 2d ditto Mr. Dover, for Jemmy Webb, Seedling of 1841. Ditto ditto, Mr. Brown, of Slough, for Vivid, Seedling of 1842.

PICOTTEES. 1st Class Prize, Mr. Headley, for Nannette, Seedling of 1841. 2d ditto, Mr. Robinson, for Nottingham Hero, Seedling of 1841. Ditto ditto, Mr. Halliday (not named), Seedling of 1841. 1st ditto, Mr.

Barnard, for Mrs. Lindley, Seedling of 1842. 2d ditto, Mr. Edmonds, for Emily, Seedling of 1842. Ditto ditto. Mr. Norman, for Henry, Seedling of 1842.

SOUTH LONDON FLORICULTURAL SOCIETY. The July Show of this Society took place in the Surrey Zoological Gardens, on Tuesday, July 26.

We never remember to have seen a finer display of Carnations and Picottees: upwards of 60 boxes were staged. Some promising Seedlings were also shown, but without the intended names. Roses were shown in large and splendid collections by Messrs. Paul, of Cheshunt, and Lane, of Berkhampstead. Mr. Pamplin, of Walthamstow, had a collection of his beautiful seedling Pelargoniums; among them were several we saw at Chiswick, continuing in fine bloom: we noticed Count d'Orsay, Aurora, Hero, Queen of the East, Sir Isaac Newton, Lucy, and Laura. Two handsome collections were shown by Mr. Gaines and Mr. Catleugh; in the first we saw Grand Duke, Alexandrina, Prince Henry, Joan of Arc, Isabella, Firebrand, Amaranth, Lifeguardsman, Caroline, and Beatrice. Mr. Gaines had also a fine collection of Verbenas. The collections of plants were not so fine as we could have wished, owing, probably, to the lateness of the season. A collection shown by Mr. Clarke contained good plants of Ixora coccinea, Polygala oppositifolia, Thunbergia alata, T. crenata, T. alba, Crowea saligna, and several Ericas. In Mr. Jackson's collection were fine plants of Erica princeps, E. Savileana, E. ventricosa superba and E. jasiminiflora alba. In Mr. Pawley's were two well-blown plants of Manettia cordata, Erica cerinthioides, Oncidium flexuosum, and Cyprepedium insigne. Mr. Ivery exhibited a large collection of Fuchsias, containing good plants of Iveryana, Gem, Stewartia, Dicksonia, Fulgens, Multiflora, &c.

The following prizes were awarded:

Class 1st, Amateurs (Members only): Best 12 blooms of white ground PICOTTEES: Gold Medal, Waine's Queen Victoria, Sir Robert Peel, Trip to Cambridge, Mrs. Annersley, Sharpe's Hector, Princess Augusta, Lady Dacre, Lady Penn, Burrough's Sylph, Green's Victoria, Vespasian, and Duke of Wellington, Rev. A. H. Matthews; 2d, large silver ditto, Mr. Headley; 3d, middle silver ditto, Mr. Barnard; 4th, small silver ditto, Mr. Edmonds.

Best 12 CARNATIONS. Large Silver ditto, Mr. Headley; 2d, middle silver ditto, Mr. Dowler; 3d, small silver ditto, Mr. S. Smith.

Best 24 PANSIES. Large silver ditto, Mr. Bridges; 2d, middle silver ditto, Mr. Bantry; small silver ditto, Mr. Fyffe.

Best collection of CUT FLOWERS. Middle silver ditto, Mr. Bushell; 2d, small ditto, Mr. Rowley.

Best collection of MISCELLANEOUS PLANTS. Large silver medal, Mr. Townley; 2d, middle ditto, Mr. Bushell.

Class 2d, (Gentlemen's Gardeners.) Best collection of MISCELLANEOUS

PLANTS. Gold medal, Mr. Clarke, gardener to T. Smith, esq.; 2d, large silver ditto, Mr. Attlee, gardener to H. Beaufoy, esq; 3d, middle silver ditto, Mr. Pattison.

ERICAS. Middle ditto, E. Templeæ, Princeps, Parmentieri rosea, Massonia, Tricolor, Eximia, Shannoniana, Infundibuliformis, Ampulacea, and several others, Mr. Wilson.

Best COCKSCOMBS. Middle ditto, Mr. Scorrer.

BEST 12 BALSAMS. Middle do. Mr. Doran, gardener to T. Hawes, esq.

Best collection of ROSES. Middle ditto, Mr Foster; 2d, small ditto, Mr. Parsons.

Best 12 CARNATIONS. Hogg's Colonel of the Blues, Jacques's Iris, Wilson's William IV., Fletcher's Beauty of Birmingham, Bucknall's Talma, Puxley's Prince Albert, Barnard's Duke of Roxburgh, Brookes's Flora's Garland, Wilson's Harriet, Wigg's Earl of Leicester, Holmes's Count Paulina, Mansley's Beauty of Woodhouse, 1st and 2d, Mr. Embleton, gardener to T. Barnard, esq.

Best 12 white ground PICOTTEES. Middle ditto, Queen, (Green's,) Beauty of Reading, Lady Ackland, Garrett's Lady Dacre, Wood's Alicia, Well's Lady Flowers, Wildman's Isabella, Brinkler's Duchess, Wilson's Pluperfect, Barrand's Cornelius, Wilson's Harry, Dickson's Trip to Cambridge, Mr. Embleton; 2d, small ditto, Mr. Ancock.

Best 24 PANSIES. Middle ditto, Mr. Ancock.

Best collection of CUT FLOWERS. Large ditto, Mr. Bruce; 2d, middle ditto, Mr. Bourne.

Class 3d, (Nurserymen, Florists, &c.) Best collection of MISCELLANEOUS PLANTS. Gold Medal, Mr. Jackson; 2d, large silver ditto, Mr. Pawley; 3d, middle ditto, Mr. Catleugh.

Best collection of PELARGONIUMS. Large ditto, Sapphire, Witch, Flash, Beauty, Cecilia, Coronation, Una, Louis Quatorze, Launcelot, Augusta, Drucilla, Nymph—Mr. Catleugh; 2d, middle ditto, Alexandrina, Firebrand, Prince Henry, Grand Duke, Victory, Arabella, Joan of Arc, Captivation, Beatrice, Amaranth, and Caroline—Mr. Gaines.

ERICAS, large silver ditto, Mr. Jackson.

ROSES (in bunches). Large ditto, Messrs. Lane; 2d, middle ditto, Messrs. Paul; best 36 varieties, (single specimens,) small silver ditto, Messrs. Lane.

Best 12 CARNATIONS. Large ditto, Ely's Duke of Bedford, Roi des Capuchins, Brookes's Flora's Garland, Barnard's Duke of Roxburgh, Beauty of Woodhouse, Hufton's Prince George, Hufton's Duke of Wellington, Young's Sir Robert Peel, Mansley's Bonny Bess, Georgiana, Martin's Splendid, and Earl of Leicester—Mr. Norman; 2d, middle ditto, Mr. Franklin; 3d, small ditto, Roi des Capuchins, Stone's Venus, Pollitt's First-rate, Wilmer's Hero of Middlesex, Ely's Lady Ely, Brookes's Flora's Garland, Headley's William Cobbett, Twitchett's Don John, Jacques's Georgiana, Brown's Kentish Beauty, Addenbrook's Lydia, and Timandra —Messrs. Dickson.

Best 6 Roses. 1, Sir C. Lemon; 2, G. C. Fox, Esq. Best Collection of ditto, G. C. Fox, Esq.

Best 6 Carnations: Jolly Dragoon, Strong's King, Lady Rowley, Lady Noel, Lancashire Lass, Ely's Lovely Anne—W. J. Rawlings, Esq.

Best 12 ditto or Picottees: Strong's King, Invincible, Lancashire Lass, Achilles, Lady Noel, Durham, Georgiana, Maria, Wilmer's Maria, Duke of Bedford, William the Fourth, Lady Rowley—W. J. Rawlings, Esq.

Best Collection of Stocks—Mrs. Warren.

Best Collection of Mimulus—Mrs. Warren.

Best 6 Balsams—J. P. Magor, Esq.

*Extra.*

Miscellaneous Collection of Plants in Flower: Lantana aculeata, Thunbergia aurantiaca. Geraniums: Siddonia, Lady Carlisle, Jewess, Alexandrina, Vivid, Grand Duke, Sweet's Eclipse, Turneria elegans, Lantana scabrida, Eschynanthus parasitica, Gloxinia rubra, Fuchsia globosa, Celosia, Rondeletia speciosa, Vinca alba, Calanthe veratrifolia, Ixora Bonduca, Ardisia crenulata, Fuchsia fulgens, F. Smithii, Celsia cretica—S. Davy, Esq.

Stove Plants: Oncidium sphacelatum—S. Davy, Esq.; Hedychium flavum—Sir C. Lemon.

Croydon Pink Show, at which 13 Stands of Fine Blooms were exhibited, took place June 28th, at Mr. C. Hatcher's grounds, Green Dragon Inn, Croydon. The following were placed:

First, R. Henbrey, jun. Croydon: Omega, Henbrey's Diamond, Wilmer's Queen, Hodges's 182, Hodges's Mellona, Holme's Coronation, Duchess of Cornwall, Hodges's Gem, Dr. Coke, Hodges's Mars, White's Warden, Lady Hallowell.

Second, Mr. Bridges, Carshalton: Omega, Mrs. Austin, Wilmer's Queen, Hodges's 182, Little Wonder, Coronation, Gauntlet, Earl of Uxbridge, Creed's President, Bexley Hero, Beauty of Kent, Hodges's Mellona.

Third, G. Young: Omega, Wilmer's Queen, Henbrey's Diamond, Hodges's Black and Clean, Holmes's Coronation, Hodge's Mellona, Hodges's Gem, Hodges's Mars, Hero of Croydon, Majestic, Countess Plymouth, Earl Cheltenham.

Fourth, J. Agate. Fifth, G. Graham. 6th, T. Bursill.

Wallington Pink Show. June 29th.

First, Mr. Bridges: Omega, Wilmer's Queen, Mrs. Austin, Litttle Wonder, Hodges's Mellona, Holmes's Coronation, Dr. Coke, Earl of Uxbridge, Beauty of Kent, Bexley Hero, Dawson's Gauntlet, Tom Davy.

Second: Henbrey's Diamond, Omega, Wilmer's Queen, Hodges's 182, Holmes's Coronation, Lady Hallowell, Hodges's Gem, Duchess Cornwall, Hodges's Mars, Hodges's Mellona, Wilmer's Duchess of Kent, Majestic.



FUCHSIA TODDIANA.

London How & Parsons Oct.1 1842.

THE

# FLORIST'S JOURNAL.

October 1, 1842.

## ON THE FUCHSIA.

WITH AN ENGRAVING OF F. TODDIANA.

In a former Number of the Florist's Journal we had the satisfaction of introducing to the floral world that much-admired species F. Corymbiflora: since then it and its ally, Fulgens, have been the parents of a progeny as beautiful as numerous; and we have now the same pleasing office to perform for one of those offsprings. F. Toddiana is the conjoint issue of fulgens and the old globosa, or, in other words, a cross between them. It was raised by Mr. Morris Todd, of Rolvenden, Kent; also the fortunate raiser of a variety we have not before seen eclipsed, namely, F. Moneypennii.

We are fond of the retrospective. How gratifying it is to reflect for a moment on the highly-advanced state of horticulture at the present day. A new plant is scarcely obtained before it is multiplied, improved, or varieties gained of it, and in a short time distributed through the whole expanse of society. Our present subject fully bears out these remarks; scarcely a person but has a collection of fuchsias, and certes, they are sufficient to satisfy the most fastidious.

In addition to the information given with F. corymbiflora in the 17th Number of our work, we may mention that experience has shown that a distinction should be drawn between those which are natives of Mexico, Brazil and Peru, and those received from Chili, Port Famine, and the adjacent places. The first and their hybrids are more tender, attaining a greater size,

and are for the most part more showy, and consequently better adapted for the greenhouse or conservatory: those from the latter places have a more robust constitution, are generally of a dwarfer and more compact habit, and the flowers, though smaller, have the advantage when numerically considered: these attributes evidently fit them for beds in the flower garden. The Mexican varieties may be grouped also in the open air during the summer; but their appearance in this situation does not equal that of the Chilian species and their hybrids: some of these latter are sufficiently hardy to withstand the severity of our winters by being cut down and the stole covered with mulch. One of the most beautiful subjects we ever claimed cognizance of was a hedge of fuchsias—treated in this way they annually presented a most resplendent mass. The routine culture in other respects is uniformly the same. Mr. Todd has favoured us with the subjoined concise but comprehensive account of his method of cultivating them:

"Dear Sir,—I grow all fuchias to a single stem, which they will do in a summer's growth if you strike them early in the spring. I put my cuttings in according to the number I wish to strike round the inside of a small pot filled with sharp sand, and give them a good watering, so that the sand will be completely closed tight round the cuttings; I then place them into a gentle heat; and as soon as they are well rooted, which is easily told by their growing freely, I pot them each into a 60 sized pot, well drained, using a loamy soil, well enriched with decomposed cow or sheep dung, with a sufficient portion of sand to keep the compost from closing too tightly, so that the young roots will have freedom in the soil; and repot them according to the strength of the plants, as they fill their pots with roots.

"In October, as they begin to exhaust themselves, more particularly the older plants, after a very luxuriant summer's flowering, I gradually dry them until all the leaves are off, then spur them all in, the young plants to within one joint of the main-stem, and the older plants to within one joint of the previous year's pruning; then I put them in a dry airy place, or at the back of the stage in the greenhouse until the spring; and as soon

as the buds begin to smell I shake them out, that is, the earth from the roots, and cut all the long matted roots off; and as the roots are greatly reduced they will require smaller pots, which must be quite clean, and give them a good drainage. I prepare a compost of the best loam I can get well enriched with decomposed cow or sheep dung, and a quantity of sharp sand sufficient to keep the compost lively and free for the young roots to work in; I then give them a good watering sufficient to pass through the bottoms of the pots, and let them remain until they become dry again, afterwards water rather sparingly until the plants begin to root freely. When they are well rooted and the weather warm, they will take water freely if the drainage is good; and as soon as the pots are filled with new roots I give them another shifting into the blooming pots. Fulgens and Corymbiflora answer admirably this way; I had thirty-six fine trusses on a plant of Fulgens this year, and they continue to bloom up to the present time. My specimens have shown perfect masses of their beautiful flowers from the rim of the pot to their tops, forming a complete column of beautiful pendant flowers.

"By impregnation on any of the shrubby sorts with the farina of Fulgens, some very interesting varieties are obtained. If the seeds are well ripened in August, I sow it directly, separating it from the pulp by rubbing and washing it in water; a fine even surface of soil is required on which to lay the seed, which must be covered about one eighth of an inch; but before I cover the seed I give it a gentle watering, then put the pot into moist heat, and the earth must not be allowed to dry when the seeds begin to vegetate, or they will be destroyed; when they are up I treat them as mature plants. If I keep any seeds till the spring, I dry them in their pods. MORRIS TODD."

The following list contains a few of the best varieties:

Fuchsia formosa elegans.
" stylosa conspicua.
" richartonia.
" moneypennii.
" tricolor.
" rosea alba.
" conspicua arborea.
" Cowperii.

Fuchsia magnifica, Thyne's.
" magnifica, May's.
" racemiflora.
" pendula splendens.
" invincible.
" floribunda magna.
" Gybboniana and Bellonia.

## WINTER MANAGEMENT OF PLANTS IN FRAMES.

During that season when the beds and borders of the flower-garden have lost all or most of their beauty, the chief attention of the cultivator is directed to the management of his house plants, and to the preservation of those which answer best in the open air during summer, but are unable to withstand the severities of a British winter without the chance of being altogether killed, or so weakened or destroyed as not to recover their natural vigour for a season or two; or if they should do this, often remain unsightly objects. In extensive and complete establishments there are all sorts of winter accommodation for plants whatever may be the degree of their delicacy. But among every hundred who love flowering plants, and cultivate them to some extent or other, there are not above two or three who possess, or are able to possess, all these accommodations: the greenhouse is in general the resource of such parties; but this is not always the best, and besides the management of it is attended with considerable trouble and some expense; and if it is intended to force some plants for winter ornament or for early flowering, and merely to keep others alive, it is difficult to accomplish both purposes in one small house. The forced flowers require more heat and light than the merely preserved ones, and though some difference may be obtained by placing the plants nearer to or farther from the glass, there is always some danger of prematurely starting those wished to be preserved. Light being the grand stimulus to the flowering of plants must be freely admitted to such as are forced into flower during the winter or early spring; and if, as is generally the case, the plants are natives of more tropical climates than that of Europe, and consequently having longer winter days, the difficulty, especially in damp and humid districts, where the air is almost continually obscured by clouds and fogs, the great difficulty is in obtaining sufficient light for winter forcing.

This points out a difference which should be observed in the treatment of half-hardy plants. If they are to be forced into

flower earlier than they would flower naturally, they must have free exposure to light as well as fresh air at such times as may be necessary; the degree of which depends greatly on the habit of the plant, and that again upon the atmosphere which is natural to it; which in general may be judged of from the physical character of its native region. Commonly speaking, the more tropical the plant is, and the more dry the atmosphere when the plant comes into flower, the more light is necessary in forcing it, but if the plant flowers in a clouded atmosphere or under the shade of thick trees, much less light is requisite. Thus in the forcing of plants from different physical localities, even though they have the same length of day and the same average temperature, there is some little difficulty in doing justice to both; it is by experience alone the cultivator is able to determine the exact amount required by each.

Frames, especially if there are several of them, possess advantages over a greenhouse for the winter management of half-hardy plants, because all degrees of heat may be given them from the mere protection from frost to a much higher degree than that of the warmest climate in its hottest season. Simply placing a frame over the plants and raising it at the corners with brickbats is a sufficient protection for many plants, especially for such as require much air during the winter; a common frame, if close at the top, has a temperature considerably higher than the atmosphere without, even though it is elevated for the admission of air as described.

The reason is this, the earth when not exposed to the immediate action of the sun is continually giving out heat by radiation; this heat naturally warms the air nearest the surface, and if a substance of far less substantial texture than the glass of any frame is so placed as to prevent the heat from ascending into the wide expanse, the region below the intercepting surface is always higher in temperature than it otherwise would be; clear nights are always colder than cloudy ones, although the general temperature of the twenty-four hours should be exactly the same. It is from this reason that though the air is otherwise well disposed for its formation, dew is not produced in cloudy nights so readily or so copiously as on nights which are clear. This is a wise provision of Nature, as it protects plants

growing in the open air from severe vicissitudes to which they would be otherwise subjected, and which would be very injurious to their health, and especially to their flowering in the early part of the year or in the autumn. When the radiating heat raises the temperature of the air within the frame that air has a tendency to ascend and not to escape by the bottom of the frame: this gives a good hint as to the best means of protecting half-hardy shrubs from severe cold during the winter, in cases where they cannot be brought into the frame or greenhouse.

Thatching up with fern, furze, or any other shrubby material, which is a bad conductor of heat, is probably the best method; it may be continued down to the ground so as to protect the stem as well as the twigs and leaves, or buds, if the shrub is an evergreen. But this kind of covering is so complete and keeps the plants so warm that caution is necessary in removing it: that must not be done at once, or too soon, because the covering renders the plant tender, and therefore easily affected by cold. Another good plan is to cover the plant with a cap of bast mat, but this should always be placed over the plant in the shape of a cone, with the base of course towards the ground, that the plant may have the benefit of the radiating heat, which is entirely lost if the ends of the mat are drawn close to the stem of the plant.

If the plants are wintered in a frame they require little more attention, and there are modern improvements, by the adoption of which a maximum of benefit is obtained by a minimum of labour. The common wooden frame has no accommodation for flues, and therefore heating composts, the principal of which is stable manure, were the usual and almost the only means of obtaining heat; fermentation, and consequently bottom heat, were generally over before the plants were put into the frames to winter, and though this has not been the case, a bottom heat, from fermenting manure, is not a good one for flowering plants: it stimulates the roots and gives out gaseous products, which are not favorable to the healthy growth of plants, and altogether such a stimulus makes the plants tender and easily subject to injury. Heat from warm water, which can also be made bottom heat, by having the pipes a short distance below the floor, or

substance on which the plants stand, is by far the most preferable mode. As to all the ways of obtaining heat in a frame by means of fermentation there is one general objection: all plants placed in such a situation require air, that is, change of air for sweetening the effluvia of the compost; and many require change of air for their own health without any reference to injurious effluvia in the frame. The usual and indeed almost the only way of giving this fresh air has been by opening the frame more or less, and keeping it open for a longer or shorter time according to the state of the weather and the habit of the plant. This air necessarily lowers the temperature and diminishes the capacity for heat in the air, immediately in contact with the plants, for the greater specific gravity of this colder air causes it to occupy the lower part of the frame, by which the plants generally are chilled and a sort of unwholesome dew formed upon them. This, to the full amount of the change produced, has the same effect as if the plants were changed from a warm and dry atmosphere to a cold and humid one, and there is a fresh chill when the frames are closed, and the dew thus formed is changed into vapour, and this second chill is as bad as the first. These temporary chills are not very injurious, if the plants are merely in the frames for repose and not for growth, or for ripening their stems or ligneous parts, though it is a little injurious in all cases.

A great improvement in the ventilating and heating of frames and pits, which also applies to all other horticultural erections, is one made by Mr. Weeks, junior, of King's Road, Chelsea: both he and his father have paid much attention to the application of warm water for floricultural and horticultural purposes. The recent improvement, which is an important one, was made for forcing cucumbers in frames or pits, so that they might be ready for use in winter or very early in spring; it is only applicable in conjunction with hot water pipes; with them it may be applied so as to give a temperature of 120°, or even considerably more; as great a temperature indeed as any plant can bear without injury; and for many species from the hottest parts of tropical climates, it may be made more effective than any stove, as whatever degree of humidity is required in the air may be obtained. If, on the other hand, great heat and dry air are required, they

can be procured with equal facility. The means by which this is brought about is the introduction of small tubes, open at one end to the external air; entering the frame, passing for some length through the hot water, and then having their discharging extremity in the frame. It is obvious that by this simple contrivance, and without any additional apparatus, dry air at the requisite temperature may at all times be delivered into the frame. 212° is of course the limit above which the temperature cannot be raised by this means, but that is a degree of heat which no plant can bear. The temperature is regulated by the length of the air-tubes within the hot water, being greater in proportion as they are longer, and the lengths and number of the pipes together may be adjusted to whatever degree of heat may be required. It might be as well however, if there were valves attached to the external extremities of the air-tubes, so that they might be wholly opened or wholly shut, or partially used to any extent that might be desired. This method of giving air to plants is far superior to that of opening the lights of the frame, for when these are opened the cold air, as has been already stated, is applied directly to the plants, and moisture is condensed upon them; but when warm air is let in, and further down the pit the better, there is no chilling, and the gradual letting in of the warm air by valves would prevent any sudden change of temperature; and sufficient moisture may always be commanded by applying water to the heating pipes; but this is scarcely ever required for such plants as are usually kept in pits or frames during the winter; the great desideratum being to keep the atmosphere about them as dry as possible. And it is in this particular that pits heated by means of hot-water pipes or flues are so essentially superior to wooden frames and fermenting materials. Every pit or frame, whatever its construction, intended for the preservation of plants through the winter, should be entirely above the surface of the earth, and rather elevated than sunk; an efficient drain should be also constructed to carry off all superfluous water which may escape from the plants when watered; and open stages should be placed for the pots to stand on. Among other things to be particularly observed is the removal of anything likely to stagnate or render impure the air within the pit or frame; and it should

be also considered that though accommodation may be found in the shape of platforms and shelves, for a great number of plants, yet a smaller number will undoubtedly succeed better in the same space; crowding plants is in itself a most reprehensible practice, for in a space containing a certain quantity of air there may be sufficient for a healthy supply to a limited number of plants. Yet if that is doubled or increased beyond the proper number, it necessarily follows there must be a decrease in the individual supply; and besides this there is an increased amount of perspired and consequently impure air: this is a most prolific cause of the many failures which annually occur.

We think a great improvement might be effected in the construction of pits and other places intended for this purpose, by inclosing them in air-tight chambers; that is, to have two walls instead of one; or it might be rendered clearer by supposing a pit of the usual construction surrounded by another slight brick wall, at a distance of from four to six inches from the original, and the two connected at top with tiles cemented on so as to exclude all communication with the external air; this cavity would contain heated air, caused by the radiation of that in the inner walls. And so also with the coverings over the glass, used at night and very severe weather; if these are elevated a few inches above the lights they are found far more effective; in fact, two mats so placed are fully equal to three placed in contact with the glass; from the same reason, we think two walls better than one, as a medium or non-conductor is placed immediately between the heated air in the interior of the frame and the cold at the exterior. We once tried the experiment with two hand-lights; a thermometer was placed in each, and the one covered with a closely fitting covering, and the other glass with a covering kept at about three inches from it; all around this latter was $2\frac{1}{2}^{\circ}$ higher when examined than that with the close covering.

In conclusion, we may remark as the season for active preparation for this part of floriculture is at hand, cultivators will do well to thoroughly consider the best means, and to improve them so far as they are defective; and having done so, zealously set to work with their winter management. EDITOR.

## FUCHSIA CORYMBIFLORA.

TO THE EDITOR OF THE FLORIST'S JOURNAL.

SIR,—The following is the treatment which has been given to the Fuchsia Corymbiflora, and which I am sure agrees with the constitution of the plant, as I have had it fourteen feet high this year, and have been able to walk in an upright position under the branches.

In March 1841, I obtained a plant about six inches high, but in good health, and the leaves, though small, clean; as soon as the roots were round the pot I shifted it, and continued to do so (in a light rich compost "composed of one third leaf-mould, one third rotten manure, and one third peat and loam, with a little silver sand added to the mixture,") until about the middle of September, at which time the plant bloomed, when the leaves were nineteen inches long, having increased at each shifting; there were several bloom stems, but the main stem had about 150 blooms on it, and the others were smaller. I should tell you that the plant went up quite straight about six feet until it bloomed, at which time many lateral shoots were thrown out, which bloomed but with poor trusses during the winter. In the spring I headed all the shoots back except two, which bloomed all the spring; the others broke nicely, and when the shoots were about four inches long, I determined to shake the plant out of the old earth, to pull away the old roots, and to repot it as directed by Mr. Standish in the July Number of last year's Florist's Journal, (it having stood all the winter in a pot nineteen inches in diameter,) notwithstanding the predictions of some as to the harm it would do. This summer the plant has been shifted since shaking out, and now stands in a pot twenty-two inches and a half in diameter, but it has amply repaid the pains bestowed on it by a profusion of elegant bloom and beautiful leaves. While flowering the plant again made numerous side shoots, but it has been recently cut back, (having been in bloom ever since last September,) and is now breaking very nicely. As to the future treatment I am not yet quite resolved what I shall do; I am convinced that this Fuchsia will not stand much heat, as in that case

the leaves fall in great numbers, the flowers come smaller, and the colour is paler. I have tried it in the open ground where it grows vigorously and blooms well. Some suppose this a shy bloomer, but I think that the contrary is the fact, as I have had seven in bloom this summer, most of which were from different places. Should this paper be worth your attention, you are most welcome to it, as I hope, although I cannot enhance the value of this species of Fuchsia, I may communicate to others, less fortunate, the course I have pursued, and which has succeeded so well.

J. R. JUDGE.

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## LIST OF NEW PLANTS.

MONADELPHIA DECANDRIA—*Leguminosæ.*

*Brownea Coccinea.* A fine stove plant, the stem erect, attaining a height of ten feet; the branches pendulous, as also the foliage, which is large and ample, of a fine bright green; the flowers fascicled, of a brilliant vermilion rose colour, about an inch and a half in length; the flower-bud and calyx are likewise of the same uniform colour. The stamens, inserted with the petal of the same colour, and being about twice the length, hang below the flower, and when tipped with the orange yellow pollen, give the whole a fine appearance. The plant seems to be difficult to flower, as it was introduced so far back as 1793 by Admiral Blyth, from Jamaica, and no instance is recorded of its flowering till February last, when it bloomed in the Botanic Garden of Edinburgh.—*Bot. Mag.*

POLYANDRIA POLYGYNIA—*Magnoliaceæ.*

*Illicium Religiosum.* This is the sacred aniseed tree of the Japanese, who have a custom of strewing wreaths and branches of it on the graves of their friends; their priests also burn the bark as an incense on the altars of their deities; and their public watchmen make a singular use of the pulverized bark by burning it in hollow tubes, as a means of measuring time,—when the fire, by burning, gradually reaches a certain mark, they strike a bell, and so announce it to the public. It was lately introduced

into Holland by Dr. Siebold, and from there sent to the Botanic Gardens, Kew, by Mr. Makoy of Liege. It is a greenhouse shrub, possessing no particular claim to beauty; the flowers are green, mostly solitary; the foliage is pale green and moderately abundant.—*Bot. Mag.*

GYNANDRIA MONANDRIA—*Orchideæ.*

*Maxillaria Acutipetala.* This is a beautiful little Maxillaria, resembling M. tenuifolia in its leaves and manner of growth, and M. picta in its inflorescence. It was found in Central America by Mr. Barclay, collector to the Royal Gardens at Kew, at which place it bloomed in March and April last; the flowers are pale orange, spotted with blood-colour, sepals about an inch and a half long, oblong acute and spreading, petals smaller of the same shape, colour, and character. The flowers rise mostly in pairs on short peduncles, from the pseudo bulbs, which are clustered, oblongo-ovate, deeply furrowed; the younger ones clothed with brown acuminated scales.—*Bot. Mag.*

SYNGENESIA NECESSARIA—*Compositæ.*

*Othonna frutescens.* A showy greenhouse plant, rising about two feet high, thickly covered with yellow flowers, lately introduced to the Birmingham Botanic Gardens.—*Bot. Mag.*

MONŒCIA POLYANDRIA—*Begoniaceæ.*

*Begonia Hydrocotylifolia.* A rather pretty dwarf species, much resembling some of our old varieties, and requiring the same treatment. Sent from the Botanic Garden of Berlin.—*Bot. Mag.*

OCTANDRIA MONOGYNIA—*Combretaceæ.*

*Combretum Grandiflorum.* A very handsome stove climber, differing from the old yet handsome C. purpureum (or poivrea coccinea) in having somewhat larger foliage and a more graceful habit, the growth also is freer; "the flowers are arranged in altogether a different manner, issuing from both sides of the principal stalk, their short pedicles curve upwards, so as to give them the appearance of two rows of flowers placed side by side on the upper surface of the spike." A native of Sierra Leone, from whence it was sent in 1824, but supposed to have been nearly lost.—*Pax. Mag. Bot.*

MONADELPHIA DECANDRIA—*Leguminosæ.*

*Lalage Hoveæfolia.* An ornamental greenhouse plant, producing lively papilionaceous flowers; the standard is a clear bright yellow, which is pleasingly contrasted by the light purple hue of the wings and keel; but seeming to have an inclination to become weak and inclined to straggle, so that in the cultivation this should be provided for by frequent cropping of the shoots. To cultivate it to advantage it should be potted in light loam and heath-mould, and allowed a light and airy part of the greenhouse. A native of New Holland.—*Pax. Mag. Bot.*

MONADELPHIA POLYANDRIA—*Malvaceæ.*

*Malva Campanulata.* This plant may be termed a half-hardy perennial; it is certainly one of the handsomest species of the extensive genus, Malva. The flowers, which are delicate pale blue with a slight tinge of pink, are produced in great abundance, and relieved of that coarseness so frequently seen in plants of this genus. It is well suited for planting in masses in the summer flower garden, and only requires the protection afforded by a cold frame during the winter, when it should be cut closely down and rather sparingly supplied with water. It was originated in the pine-apple nursery about three years ago.—*Pax. Mag. Bot.*

DIDYNAMIA ANGIOSPERMIA—*Scrophulariaceæ.*

*Penstemon Gentianoides var. Splendens.* A very fine variety of the old Gentianoides, combining the bright scarlet of the variety coccinea, with the purple of the original species. The flowers are rather larger than those of either of the above-named kinds, and are produced in great profusion. It requires the treatment given to half-hardy plants.—*Pax. Mag. Bot.*

DIDYNAMIA ANGIOSPERMIA—*Bignoniaceæ.*

*Bignonia Picta.* A very handsome species, recently flowered in the collection of Messrs. Rollisson, at Tooting. The flowers are campanulate, the tube about two inches in length, and half as much in diameter; limb spreading nearly two inches in width, of a fine violet colour tinted with deep purple, produced in pairs on all parts of the plant which is a compact creeper, and is probably as hardy as B. capreolata, and like other bignonias delights in strong rich loam. It is well adapted for covering trellis

and the lower rafters of a greenhouse, blooming early in spring and retaining its flowers a long time. It is supposed to be a native of Buenos Ayres.—*Bot. Reg.*

HEXANDRIA MONOGYNIA—*Amaryllidaceæ.*

*Coburgia Humilis.* A native of the Andes, where it was found at an elevation of 10,284 feet. It assumes something of the character of the minor narcissus; the flowers are of an orange scarlet colour, about two inches in length, of proportionate width. It affects a strong rich soil, and flowers in March and April; introduced in 1840.—*Bot. Reg.*

GYNANDRIA MONANDRIA—*Orchidaceæ.*

*Mormodes Lineatum.* A very singular feature is presented in the labellum and column of the flowers of this plant, which have the appearance of having been broken and unskilfully set again; they are highly fragrant, and when first open are of an olive green which passes to yellow, blotched or marked at first with brown, which gradually assumes a reddish tint. The plant is a native of Guatemala, from whence it was sent in 1840 by Mr. Hartweg.—*Bot. Reg.*

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## A LIST OF HARDY HERBACEOUS PLANTS.

IT is a startling assertion that the art of gardening is never perfect; an equally trite observation is, that a garden is never finished: but they are equally true. We may modify it by asserting that they never are nor ought to be *stationary*. Even when our borders are emblazoned with the gayest flowers, are ranged with the finest discrimination, attended with unwearied assiduity, and all redolent with beauty, some alteration or improvement will suggest itself to the practised eye and refined taste of the connoisseur: these suggestions should be properly noted at the time, that the imperfection may be removed, and a still better arrangement substituted at the proper season. There are many who, without doubt, entertain the same ideas, with a wish to make the desired change, but are deterred from a want of some directory: this has induced us to give the sub-

joined list. We have endeavoured to select the most ornamental from among the very numerous plants adapted, in some degree or other, for the open air; and if we have inadvertently passed over any deserving of notice we shall feel obliged if our correspondents would supply the deficiency.

| | HEIGHT. FEET. | COLOUR. | DURATION OR TIME OF BLOOMING. |
|---|---|---|---|
| Achillea ptarmica | 1 | White | July to November. |
| „ millefolium rubra | 2 | Red | June—October. |
| „ speciosa | 1½ | White | July—September. |
| „ tomentosa | 2 | Yellow | May—October. |
| Aconitum japonicum | 6 | Blue | June—September. |
| „ album | 4 | White | July—August. |
| „ lycoctonum | 3 | Yellow | July—August. |
| „ speciosum | 3 | Blue | July—August. |
| „ paniculatum | 3 | Blue | June—September. |
| „ anthora | 1½ | Pinkish Yellow | June—August. |
| Adonis vernalis | 1 | Yellow | March—April. |
| „ pyrenaica | 1½ | Yellow | July. |
| Agrostemma bungeana | 2 | Red | June—September. |
| „ coronaria alba | 3 | White | June—September. |
| „ „ plena | 1½ | Red | June—September. |
| Alstrœmeria pelegrina | 1½ | Red and Green | June—August. |
| „ aurantia | 1½ | Orange | June—August. |
| Alyssum argenteum | 1 | Yellow | April—May. |
| „ montanum | ½ | Yellow | July—August. |
| „ murale | 1 | Yellow | April—May. |
| Ammobium alatum | 2 | White | March—Sept. |
| Amaryllis, or sternbergia, lutea | ½ | Yellow | October—Nov. |
| „ belladonna | ½ | Flesh | July—September. |
| Androsace lactea | ½ | White | June—August. |
| „ chamæjasme | ¼ | Pink | June—August. |
| „ villosa | ¼ | Pink | June—July. |
| „ carnea | ¼ | Flesh | July—August. |
| Antirrhinum majus | 2 | Pink | June—August. |
| „ purpurea & varieties | 2 | Purple | June—September. |
| Aquilegia atropurpurea | 3 | Purple | May—June. |
| „ canadensis | 3 | Red | May—June. |
| „ glandulosa | 2 | Blue | May—July. |
| „ vulgaris pleno | 2 | Blue | May—July. |
| „ alpina | 1 | Blue | May—June. |
| Arabis albida | ½ | White | January. |
| „ siberica | ½ | White | January—May. |
| „ deltoides | ¼ | Lilac | March—May. |
| „ crispata | 1 | White | May. |
| Aster novæ angliæ | 6 | Purple | September—Oct. |
| „ „ ruber | 6 | Red | September—Oct. |
| „ grandiflorus | 2 | Purple | October—Nov. |
| „ pulchellus | ¾ | Purple | May—August. |
| „ cyaneus | 4 | Purple | September—Oct. |

*(To be continued.)*

## CALENDAR FOR OCTOBER.

STOVE.—As the plants in this department may now be supposed to be all in, and the greater part finally settled for the winter, it will be well for the cultivator to examine narrowly how each plant, or at least every tender one, appears to like its locality, and, if necessary, remove the most tender to the warmer or lighter parts of the house as the case may seem to require. The proper application of water now becomes the most essential thing to be understood. As a general rule, no more should be given than appears actually necessary to the existence of the plant; it is far safer to err on this side than in the application of too much. Endogeneous plants require less than others; it is true, plants in a stove are less liable to injury from this cause, than those in a cooler atmosphere; at the same time, though it may not positively destroy them, too much water greatly indisposes them to flower. The destruction of insects should be closely followed up. Plants in a state of actual growth, such as climbers, &c., must have due attention: thin out, tie up, and stop growing shoots, whenever it may appear necessary. Air should be supplied whenever an opportunity presents. Towards the end of the month an increase of fire heat will most likely be required. The temperature of the house should be kept as near 60° as is practicable. Keep everything clean and neat.

GREENHOUSE.—In our last Number we adverted to the erroneous impression that plants were benefited by remaining in the open air till a late period, and we must again repeat it in recommending the immediate removal of every tender plant it is desired to preserve: everything should be got in as quickly as possible, even to half-hardy plants: those which have already been placed in the house are likely to lose part of their foliage; this should be looked to, and the dead leaves removed: they soon recover their verdure, if allowed a good supply of air. The observations respecting watering in the stove apply with still greater force here; the greatest care possible is necessary to

properly regulate the supply; no more should be given than is actually required, and it should be applied in the morning. There are two exceptions in the case of camellias and chrysanthemums: the first are now forming flower-buds, and require it pretty liberally, or the buds fall off; so also with chrysanthemums, which may now be brought into bloom. In arranging the plants, those which are tender should be placed more immediately under the eye of the attendant, that any variation in their growth may be noted. Seedlings and recent plants should be placed close to the glass: climbers should be pruned, and tied, as they require it. Geraniums and other plants, desired to be bushy, should be frequently turned to the light: give air every day, unless very rough; but close at night. Ericas require an abundance of air, and the cultivator must be careful, lest, in his anxiety to avoid over-watering, he allows them to become dry. If worms are supposed to be in any of the pots, a gentle watering of lime water will dislodge them. Constantly watch for the appearance of insects, and destroy them on their first approach. Dry off alstræmerias, &c.

Flower Garden. Though the whole of the greenhouse and many of the half-hardy plants are now removed, there should still be a sufficiency of flowers to prevent the appearance of barrenness; and where the ground is unavoidably empty, let it be at once put into requisition for spring flowering plants or bulbs. The planting of many kinds, such as tulips, hyacinths, crocus, iris, narcissi, &c., should be proceeded with. A few ranunculus and anemones also may be planted, though we would rather advise the planting of the principal of them to be deferred till the spring. Dahlias should be firmly secured to their stakes, and a little tan or other light litter placed over their roots to protect them from the first frosts. Pot-roots may be dried off; if it is wished to save seed of them, it should be selected only from the finest flowers. Ferrarias, gladiolus, and other autumn flowering-bulbs should be taken up. China roses should be placed in frames for the winter. Give abundance of air to stocks, mignonette, violets, and other plants in frames; water them very sparingly. If not already done, place auriculas, picottees, carnations, pansies, &c., in their respective places for the winter; give them plenty of air, and if the weather prove wet

tilt the lights both back and front. Seed gathering is now nearly over, but if any choice kinds remain out, protect them from wet with a handlight or some such contrivance; tender plants placed out, with a view to their remaining so, should have dry litter strewed over their roots, as the autumnal rains are frequently more injurious to them than even frost. Box edgings may be renewed, and planting generally commenced. Prune deciduous trees and shrubs as soon as the foliage is off. Everything should be forwarded, so that the digging of beds and borders may be commenced next month, and completed before Christmas. Continue to pot hyacinths, tulips, and other bulbs for forcing; plunge the pots in old tan or ashes, in a warm part of the garden. Take up and pot for the same purpose, roses, lilacs, kalmias, rhododendrons, and other shrubs. Keep the grass and gravel clean and neat; frequently roll them both. The flower-beds and borders also should be cleaned as far as practicable.

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## THE FLORIST'S LETTER-BOX.

### TO CORRESPONDENTS.

We must particularly request our correspondents who are desirous of receiving answers in the next number, to forward their questions by the middle of the current month, as we are obliged to go to press early for the convenience of country subscribers.

We think very highly of Messrs. MOUNTJOY's seedling Dahlia "Virgil:" form perfect, with great depth and substance of petal; well arranged, and excellent centre, altogether first-rate. It arrived too late for a notice last month.

J. TRAVERS. The striped Dahlia possesses much regularity in the disposition of the colours, (glowing crimson and white,) but unfortunately the petals are too much reflexed to allow its being classed with show flowers; we wish to see more attention paid to striped flowers; the yellow is small and sunk in the eye; it will not do. Also too late for last month.

THOS. BARTY, Esq., Dunblane. To enter upon the management of peach trees would far exceed the limits of our work; but the *scale* may be effectually eradicated by applying the following mixture: take soft soap, half the quantity (in bulk) of sulphur, mix them together, with sufficient tobacco water to form the whole into a moderately thin paste; first prune the trees, and the largest insects may be removed with a stiff brush and water; afterwards dab the mixture over every part infested; it kills both old and young. The second request is complied with in part, and will be continued; with respect to the last remark, nothing would give us greater

pleasure. Will Mr. Barty kindly lay us under an obligation by a favorable mention, we will ensure a hearty welcome to our pages. Did not arrive till too late.

We are greatly indebted to Mr. J. R. Judge for his many favours, all of which duly arrived. Gradually reduce the supply of water given to the Crinums, but do not cut off the leaves; you need not fear for the foliage of next year. An article on Eranthemum shall appear shortly.

Picottee growers will be happy to hear Mr. Giddins is again in the field; he informs us he has seven new flowers this season: Princess Royal PP, Queen Victoria Rose P, Miss Johnson, Rose P, Matilda Rose P, Lydia light RP, Conservative heavy RP, and Sir R. Peel, heavy RP.

A SUBSCRIBER, Rochester. We can recommend the following twelve Pelargoniums, Comte de Paris, Warrior, Lifeguardsman, Sylph, Priory Queen, Climax, Diademetum rubescens, Victory, Raffael, Elisa superbe, Matilda, and Louis Quatorze, as fine show varieties. The culture of Tropæolum tricolorum is a subject of too much interest to be glanced at, we therefore reserve it for an entire article, which shall appear in time for spring operations; in the mean time (if not already done) dry off the root by gradually withholding the supply of water; preserve it quite dry through the winter on a shelf in the greenhouse, keeping it in the same earth in which it has been growing.

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## FLORICULTURAL INTELLIGENCE.

### NORTH HERTS AND SOUTH BEDS HORTICULTURAL SOCIETY.

### Carnation and Picottee Show, Sun Inn, Hitchin, July 29, 1842.

TWELVE CARNATIONS, *1st Prize*—Mr. F. Barringer, Bedford: Ely's Duke of Richmond, Ely's Lord Milton, Ely's Duke of Bedford, Ely's Lovely Ann, Barringer's Apollo, Puxley's Prince Albert, Paul Pry, Lydia, Wilson's William Fourth, Hale's Prince Albert, Queen of Sheba, Hepworth's Albion. *2d Prize*—Mr. Garratt, Codicote: Seedling, Bishop of Glo'ster, Headley's Achilles, Hogg's Champion, Duke of Roxburgh, Wilson's Harriett, Duchess of Devonshire, Alfred the Great, Gregory's King Alfred, Queen of Sheba, Wiles's Perfection, Garratt's Lord Dacre.

TWELVE PICOTTEES, *1st Prize*—Mr. Garratt: Brinklow's Perfection, Russel's Incomparable, Duke of Wellington, Hogg's Miss Campbell, Wilson's Pluperfect, Sharp's Invincible, Miss Neville, Wood's, John's Prince Albert, Wood's Queen Victoria, Seedling, Wood's Triumphant. *2d. Prize*—Mr. Barringer: Ely's Grace Darling, Ely's Princess Royal, Brinklow's Perfection, Nulli secundus, Barringer's Hebe, Royal Briton, Orson's Eliza, Gidden's Miss Hennell, Wood's Queen Victoria, Sharp's Hector, Sharp's Duke of Wellington, Duchess of Sutherland.

SIX CARNATIONS, *1st. Prize*—Mr. William Pope, Biggleswade: Wilson's William the Fourth, Queen of Sheba, Don John, Paul Pry, Bishop of Glo'ster, Lord Milton. *2d Prize*—Honorable F. D. Ryder.

Best Specimen Carnation, Mr. William Pope: Don John.

Six Picottees, 1*st Prize*—Mr. William Pope: Wood's Triumphant, Miss Willoughby, Russel's Incomparable, Wood's Queen Victoria, Sharp's Invincible, Brinklow's Perfection. 2*d Prize*—W. Curling, esq.

Best Specimen Picottee, Mr. F. Barringer: Sharp's Duke of Wellington.

Thanet Floricultural and Horticultural Society, Thursday, Sept. 8, 1842.

The prize of £10, open to all England, for the best 24 dissimilar blooms of Dahlias: Burnham, Hero, Egyptian Prince, Perpetual Grand, Prince of Wales, Marquis of Lansdowne, Andrew Hoffer, Maid of Bath, Widdnall's Eclipse, Widdnall's Queen, Le Grand Baudine, Hope, Climax, Bedford Surprise, Duchess of Richmond, Bridesmaid, Pickwick, Unique, Maria, Seedling, Fanny Keynes, Phenomenon, Metella, Indispensable and Penelope—Mr. Brown of Slough.

*Plants Grown in Pots.*

Best 3 Fuchsias. Magnifica, Conspicua, Fulgens—T. N. Harris, esq.

Best 3 Petunias. Lady Peel, Superba, Bright Rose—T. N. Harris, esq.

Best 3 Cockscombs—L. C. Humfrey, esq.

Best Miscellaneous Collection of Plants in Pots not less than 6. Thunbergia Aurantiaca, Agapanthus Umbellatus, 3 Nerium Oleander, Seedling Petunia, Fuchsia Variegata, 3 Begonia Picta, Lotus Jacobæus, Lobelia Fulgens, Mahernia Pulchella, Loasa Aurantiaca, Hoya carnosa—T. N. Harris, esq.

*Cut Flowers.*

Best 12 Dahlias. President of the West, Maria, Harford's Unique, Pickwick, Duchess of Richmond, Ansell's Queen, Grace Darling, Beauty of the Plain, Andrew Hoffer, Wildeman's Haide, Cox's Defiance, Egyptian Prince—Mr. Silk: 2d ditto, Highgate Hero, Arga, Widdnall's Eclipse, Beauty of the Plain, Maria, Bridesmaid, Pickwick, Rouge et Noir, Maid of Bath, Hope, Grace Darling, Lee's Bloomsbury—Mr. Silver: 3d ditto—J. P. Powell, esq.: ditto 6 Dahlias—Rev. J. G. Hodgson: 2d ditto—Mr. Silk: 3d ditto—Sir Richard Burton: ditto 6 Lemon African Marigolds—Mr. Silk: ditto 12 Zinnias—Rev. J. G. Hodgson: 2d ditto—J. Slater, esq.: ditto Floral Device Harp—L. C. Humfrey, esq.: 2d ditto—Sir Richard Burton: ditto Bouquet of Hardy and forced Flowers—Sir Richard Burton.

*Extra.*

3 Cockscombs—Sir Moses Montefiore.

Miscellaneous Plants. Orange Tree, Citrus Aurantium, Lemon Tree, Citrus Medica, 2 Myrtles, 2 Capsicums—Sir M. Montefiore.

Miscellaneous Plants. Nerium Oleander, Polygala Grandiflora, Lisianthus Russellianus, Globe Amaranthus—D. Hooper, esq.

3 Fuchsias. Microphylla, Fulgens, Gracilis—Sir M. Montefiore.

Biennials—H. P. Cotton esq: Floral Device, Cornucopia—Richard Tomson, esq.





GLOXINIA.

1. RUBRA — 2. MAXIMA — 3. SPECIOSA.

London. How & Parsons Nov^r 1. 1842.

THE

# FLORIST'S JOURNAL.

NOVEMBER 1, 1842.

## ON THE CULTURE OF GLOXINIA.

WITH AN ENGRAVING.

THE genus Gloxinia forms part of the order Gesnerieæ, in the natural arrangement, and in the Linnæan system is included in the class Didynamia, order Angiospermia. The genus was named in memory of Ben. Pet. Gloxin, of Colmar, a German writer, author of a work entitled Observationes Botanicæ, &c. They are natives for the most part of equinoctial America, and generally found on the margins of dense woods; the soil of such places, being formed by the accumulation of vegetable matter, is light and porous, and still contains a large quantity of alimentary matter. The cultivator knowing thus much may form for himself an idea of the treatment best calculated to ensure the desired objects. And it is usually on information equally consise that growers of new plants found the basis of their operations. Modifications are often necessary on the first method, and these after being ratified form what is called the culture of the plant in its then artificial state.

The mode of cultivation applied to the Gloxinia has been pretty generally what is termed stove treatment, that is associated with the tenderest exotics; and from this cause many have been deterred from adding it to their collections, induced by a supposition of its being tender and consequently difficult to manage; this supposition we are convinced is erroneous, and we are confidently of opinion that wherever the establishment includes a common greenhouse with a small pit, or frame,

these plants may be grown to even greater perfection than when subjected to a higher temperature. The plants requiring a seasonal treatment is a great advantage, and so lessens the difficulty; as for the whole of the winter season, they only require protection from excessive cold and frost; in fact, we believe the whole order would be benefited by a more moderate application of heat; and further, we do not think we should be far from the proper limits of the case if we included several other plants which are now receiving excessive treatment, and we are glad to find cultivators turning their attention with a proper spirit to this subject. As an instance, we might mention several of the most beautiful of orchidaceous plants, which, under judicious management have been found of sufficiently robust constitution to be subjected to the usual treatment of greenhouse plants, and we doubt not that as soon as they become inured to it they will be found to produce colours quite as intense with flowers as fine, and a growth greatly improved.

As we before remarked, the treatment proper for the Gloxinia is a seasonal one; this term implies a period of rest, as well as one of actual excitement; and there is one thing which cannot be too forcibly impressed on every cultivator's mind, which is, that a continual and unvaried supply of stimuli to plants of every description which may induce them to a similar continued growth, or rather an attempt at it, is highly prejudicial; no plant in its natural state is so situated, and from this an inference may be drawn that a reduction of such stimuli in the shape of heat and water is absolutely necessary. This is the case with every plant, and those from intertropical countries require it in a much higher degree; so it is with the Gloxinia, the roots of which should be allowed to become perfectly dry; by the end of autumn, and to continue so during the winter, and as this part of its culture occurs at this season, we commence our remarks with it. In drying off, as it is called, the usual supply of water should be reduced gradually: the reduction to commence as soon as the plant has done blooming; it usually occupies about a month to render them perfectly dry and firm, when, if required, they may be taken from the mould and kept, as is usual with other bulbous roots, or what is rather prefer-

able, allowed to remain in the pots, keeping the soil about them quite dry; while in this state a dry shelf in the greenhouse is the most appropriate place for them. Of course care must be taken that the earth is not wetted by occasional drips or other causes, to prevent which the pots may be placed on their sides; on any appearance of mouldiness they should be instantly removed and thoroughly dried again. The end of February is the most proper time for starting them; they should be first repotted; the soil should be a mixture of well-rotted leaf-mould and peat, in equal quantities, with about a sixth of the whole good fresh loam and white sand: a thorough drainage is necessary. In planting, the bulb should be pressed in just level with the surface of the soil. After potting, it has been generally thought necessary to place them in a stove, but we would advise the adoption of a pit or frame in preference, with a medium heat of about 60°, which can be obtained in most places during the spring; they do not require water till they begin to grow, and then but little at first, when if the soil is observed to dry fast shading should be resorted to. As soon as they have made two or three leaves, water may be used without fear, and as they advance in growth a slight syringing on the foliage will be of service, and may be continued every day till they begin to flower. In this situation they may be kept till the middle or end of May, by which time they will have attained a good size, and probably show flower-buds; it will be necessary to admit air to them on favorable occasions, the same as for other plants, and about the time for removing them to the greenhouse it should be largely increased to render the growth as dwarf and strong as possible; they do not require any repotting, that is, supposing them to be placed in pots of sufficient size at the first potting; those called 48s are large enough for moderate sized roots. When taken to the greenhouse a light airy situation should be chosen; they do not require any particular management while flowering beyond the usual supply of water, and they continue to produce their beautiful flowers the whole of the summer: this, with the ease with which they may be grown, renders them desirable acquisitions in every collection. The varieties are very numerous, especially of speciosa, and all

the sides must be open, without any kind of protection. The back of the lights may be elevated to about six feet from the ground, which will allow a ready access to the plants, the front brought down to about three feet, the lights or shutters to be securely fastened to the cross pieces. They require no moving; and being at that height, and open all round, beneath them sufficient light is admitted. On the ground beneath this erection coal ashes should be strewed to the depth of six inches, and then the stage on which the pots are to stand. This is simply fillets of deal nailed on cross pieces, at about an inch and half distant from each other. I never found any additional protection necessary. The plants should be allowed water, in small quantities, when they appear dry; and should be continued in the same place after the spring potting, till the weather is sufficiently settled to allow of their being placed in the open air. If this method is adopted no danger need be apprehended from frost or other cause. If acceptable I may at a future period send you a critical examination of some of the leading varieties of carnations and picottees.

Will you or any of your correspondents favour me with a list of a few of the best Alpine plants, in a future Number of the Journal?

PHILO-CARYOPHYLLUS.

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## ON THE CULTURE OF ERANTHEMUM PULCHELLUM.

DEAR SIR,—Your correspondent who wishes to grow Eranthemum pulchellum (justicia nervosum) may do it readily if he allow it a moderately moist stove heat. E. pulchellum is a native of the East Indies, whence it was brought about the year 1796. Some time since the name was changed as above quoted. There are or were three species of Eranthemum—all of them ornamental; but the finest is certainly the present subject, producing its spikes of beautiful blue flowers from January to October.

In cultivating it the first essential is a proper soil: the most

suitable is a mixture of about two thirds sandy peat and the rest turfy loam; if more loam is used the plant often assumes a short stunted growth, and does not produce its flowers so freely or so fine. In potting, the soil should not be broken too much but used rather rough; this allows the water to percolate through the entire mass more regularly than when packed in closely. When potted in the spring plenty of room should be allowed the roots, as they grow rapidly, and they may be reduced for the winter potting. At each shifting a good drainage must be provided by placing first a few pieces of broken pot, and on them some rough pieces of turf or peat. The plant delights in a moist heat during the growing season, which commences with it about the middle of December.

I am glad to find you recommend seasonal treatment generally—it is of vital importance in most cases. With respect to the plant under consideration, the difference need not be so strongly marked; though a reduction in the size of the pot and so of the quantity of earth and also of moisture, both topical and atmospheric, should be observed at the close of the growing season, which, as with other plants, occurs about September; the plant is then in a better state to pass through the winter and to receive an increase of stimuli at the season of increasing vigour. It may be observed that as the plant produces its flowers from the points of the current year's shoots or on the new wood, more flowers will be produced by pruning every branch at the time of shifting for the winter, which should be done at the usual period for such work—September.

J. E. Butcher.

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## VISITS TO NURSERIES.

We some little time since paid a visit to Messrs. Smith's nursery at Hackney. The dahlias were then in fine bloom, though evidently struggling with the effects of the smoke, &c. of that confined district. Too much credit cannot be given to these gentlemen for their strenuous exertions to overcome so great an obstacle. In the collection, which is very large, we

particularly noticed that beautiful white, Wildman's Bianca; there were several plants of it, and all held good flowers. Among other acknowledged standard flowers were Smith's Coronation, rosy scarlet—Silverlock's Candidate, deep purple—Smith's Hon. Miss Abbott, lilac—Gaines's Orange Perfection—Sheppard's Bedford Surprise, rosy crimson—Hellier's Sir F. Johnstone, rosy purple—Hudson's Princess Royal buff, tipped with purple—Thomson's Princess Royal, orange, tipped and edged with red—Ansell's Rose Unique, light rose Jeffrey's Lady Harland, lilac—Whale's Attila, shaded rose and lilac—Neville's Cyclops, crimson—Low's Duke of Cornwall, light ruby—Thomson's North Star, dark crimson—Browne's Marquis of Lansdowne, shaded orange—Gaine's Compacta—Widnall's Marchioness of Exeter and Majestica—Stanley, Jones—Wildman's Hope triumphant, rose—Dodd's Prince of Wales, yellow—Adams's Prince Albert, bronze—Trenfield's Admiral Stopford, maroon—Walter's Array, crimson—and last, though not least, their seedlings Sir R. Sale, Rainbow, Rival Yellow, and Duke of Wellington; of these we shall probably have occasion to speak again.

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## LIST OF NEW PLANTS.

### Pentandria Monogynia—*Apocynaceæ*.

*Echites Atropurpurea.* A splendid stove climber, introduced from Brazil by Messrs. Veitch of Exeter. The plant in its general habit very closely resembles *E. suberecta*, but the flowers are of a very rich deep brownish purple colour, having a tube nearly two inches in length, expanding about half way from the base into a wide throat, which has an ample and spreading wing, about an inch and a half across. It requires the same treatment given to *E. suberecta.*—*Pax. Mag. Bot.*

### Octandria Monogynia—*Ericaceæ*.

*Erica Nielli.* A fine hybrid variety, between *E. aristata major* and *E. Linnæoides*. It possesses somewhat of the character of *aristata* in the disposition of the leaves and flowers; but in other respects it partakes equally of the character of

both its parents. The colour of the flowers, which are less inflated than those of *E. aristata*, is a deep pink, inclining to purple at the base, with a white limb. It was raised by Mr. Mc Nab, of the Edinburgh Botanical Garden.—*Pax. Mag. Bot.*

GYNANDRIA MONANDRIA—*Orchidaceæ.*

*Sophronitis grandiflora.* A very beautiful little epiphyte, somewhat like a dwarf *Cattleya*. The colour of the blossoms (which are remarkably large for the small size of the plant,) is a rich cinnabar, variously tinted with crimson and orange, and yellow in the centre. It succeeds suspended on a block of wood from the roof of a house, only moderately warm and moist.—*Pax. Mag. Bot.*

DIDYNAMIA ANGIOSPERMIA—*Gesneriaceæ.*

*Gloxinia tubiflora.* A very fine and interesting new species, with pure white flowers above three inches long, possessing very much of the character of *Gesneria* in its inflorescence. It was raised by Mr. Moore, of the Glasnevin Botanic Garden, from seeds sent by Mr. Tweedie from Buenos Ayres, but supposed to be a native of Paraguay.—*Bot. Mag.*

PENTANDRIA MONOGYNIA—*Lobeliaceæ.*

*Siphocampylus betulæfolius.* This is a valuable addition to the well-known and admired genus *siphocampylus*. The flowers are nearly three inches in length; the tube is of a bright vermilion red, and the limb deep yellow. The habit of the plant is not unlike *S. bicolor*. It was received at the Botanic Garden, Kew, from Mr. Gardener, who found it in the Organ Mountains. It has hitherto been grown in a stove, but will most likely prove hardy enough for the greenhouse.—*Bot. Mag.*

PENTANDRIA PENTAGYNIA—*Plumbaginaceæ.*

*Statice monopetela var. denudata.* A variety of *S. monopetela*, with smaller pale pink flowers. It is nearly hardy, requiring only a slight protection from damp in the winter. The Horticultural Society received it from the Botanic Garden of Leyden. —*Bot. Reg.*

DIADELPHIA DECANDRIA—*Leguminosæ.*

*Indigofera dosua.* A pretty species when in flower, bearing

a number of deep rose-coloured blossoms, but of rather shabby appearance when out of flower. It appears sufficiently hardy to withstand an ordinary winter in the open border if allowed a sheltered situation. It was raised from seeds sent by Dr. Falconer from the Botanic Garden of Saharunpur to the Horticultural Society of London.—*Bot. Reg.*

GYNANDRIA MONANDRIA—*Orchidæ.*

*Dendrobium macranthum.* A handsome species of this extensive genus, bearing flowers full five inches in diameter from the axils of the leaves of the stems, which are pendant. Both sepals and petals are of a rich lilac colour, as also the lip, except that there is a broad deep blotch within the side lobes. A native of Manilla. This is supposed to be the *D. macrophyllum* of Lindley.—*Bot. Mag.*

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## A LIST OF HARDY HERBACEOUS PLANTS.

(*Continued from p.* 239.)

| | HEIGHT. FEET. | COLOUR. | DURATION OR TIME OF BLOOMING. |
|---|---|---|---|
| Aster multiflorus | 3 | White | September—Oct. |
| „ argenteus | 1 | Purple | July—September. |
| „ humilis | 1 | White | August—October. |
| „ alwartensis | 1 | Red | May. |
| „ spectabilis | 2 | Blue | August—Sept. |
| „ paniculatus | 4 | Blue | September—Oct. |
| „ versicolor | 3 | White & Purple | August—Sept. |
| Astragalus canadensis | 1½ | Yellow | June—July. |
| „ alopecuroides | 2 | Lilac & Yellow | June—July. |
| „ semibilocularis | 1½ | Pale Yellow | June—August. |
| „ sulcatus | 4 | Light Blue | July. |
| „ carnosus | 2 | White | June—July. |
| „ hypoglottis | ¼ | Purple | June—July. |
| Baptista tinctoria | 1½ | Yellow | July—August. |
| „ australis | 4 | Blue | June— July. |
| „ alba | 2 | White | June—July. |
| Betonica grandiflora | 2 | Light Red | June—July. |
| „ officinalis alba | 1 | White | July—August. |
| „ alopecurus | 1½ | Yellow | July. |
| Bulbocodium vernum | ¼ | Deep Purple | February—March. |
| Bapthalmum grandiflorum | 1½ | Yellow | June—October. |
| „ salicifolium | 1½ | Yellow | June—October. |

| | HEIGHT. FEET. | COLOUR. | DURATION OR TIME OF BLOOMING. |
|---|---|---|---|
| Cacalia alpina | 2 | Purple | July—August. |
| ,, suaveolens | 6 | White | August—October. |
| Campanula pumila | ¼ | Blue | June—August. |
| ,, persicifolia alba | 3 | White | July—September. |
| ,, ,, cerulea | 3 | Blue | do. |
| ,, ,, plena | 3 | Blue | do. |
| ,, ,, alba plena | 3 | White | do. |
| ,, carpatica | ½ | Blue | June—August. |
| ,, trachelium | 4 | Blue | do. |
| ,, ,, plena | 4 | Blue | do. |
| ,, ,, alba | 4 | White | do. |
| ,, ,, ,, plena | 3 | White | do. |
| ,, sarmatica | 2 | Blue | do. |
| ,, hederacea | ¼ | Blue | May—June. |
| Centaurea montana | 1½ | Blue | June—August. |
| ,, austriaca | 1½ | Purple | June—October. |
| ,, uniflora | 1 | Purple | do. |
| ,, macrocephala | 3 | Yellow | June—August. |
| Chrysanthemum montanum | 2 | White | June—July. |
| ,, sinensis, in vars. | 3 | | September—Nov. |
| Clematis erecta | 3 | White | June—August. |
| ,, integrifolia | 2 | Blue | do. |
| ,, ochroleuca | 2 | Yellow | June—July. |
| Delphinium Barlowii | 2 | Deep Blue | June—September. |
| ,, chinense | 2 | Purple | August—October. |
| ,, ,, picta | 2 | Purple Blue | do. |
| ,, ,, albiflora | 2 | White | do. |
| ,, grandiflorum | 1½ | Deep Blue | June—September. |
| ,, ,, pleno | 2 | Double Blue | do. |
| ,, elatum | 6 | Blue | do. |
| Dianthus atrorubens | 1 | Crimson | July—September. |
| ,, sternbergii | 1½ | Red | June—July. |
| ,, superbus | 2 | White | July—September. |
| Digitalis ferruginea | 4 | Brown | July—August. |
| ,, lutea | 2 | Light Yellow | do. |
| ,, minor | ¾ | Purple | June—July. |
| Gentiana acaulis | ¾ | Blue | March—May. |
| ,, catesbæi | 1 | Blue | June—July. |
| ,, intermedia | 2 | Purple | October. |
| Geranium ibericum | 1½ | Blue | June—September. |
| ,, lancastriense | 1 | Striped | do. |
| ,, sylvaticum | 1½ | Purple | May—June. |
| Geum atrosanguineum | 2 | Red | June—August. |
| Iris susiana | 2 | Striped | April—May. |
| ,, germanica | 3 | Blue | May—June. |
| ,, sub-biflora | ½ | Purple | April—May. |
| ,, xiphoides | 1½ | Various | June. |
| ,, chinensis | ½ | Purple Blue | May—June. |
| ,, cristata | ¼ | Striped | May. |
| Lathyrus grandiflorus | 6 | Climber | May—June. |

| | HEIGHT. FEET. | COLOUR. | DURATION OR TIME OF BLOOMING. |
|---|---|---|---|
| Leucojum vernum | ¾ | White | January—March. |
| ,, æstivum | 1½ | White | April—May. |
| Lilium thunbergianum | 2 | Orange | August. |
| ,, lancifolium punctatum | 2 | Spotted | August. |
| ,, eximium | 1 | White | July—August. |
| Lilium chalcedonicum | 4 | Scarlet | do. |
| Lupinus nootkatensis | 1½ | Blue | May—August. |
| ,, elegans | 2 | Blue White | June—August. |
| ,, marshallianus | 3 | Blue | June—July. |
| Lychnis chalcedonica | 3 | Scarlet | do. |
| ,, ,, alba | 3 | White | do. |
| ,, ,, plena | 3 | Scarlet | June—September. |
| ,, alpina | ½ | Pink | April—May. |
| Narcissus ajax | 1 | Yellow | March—April. |
| ,, odorus | 1 | Yellow | April—May. |
| ,, macleaii | ½ | White | do. |
| ,, trewianus | 1½ | White Yellow | do. |
| ,, poeticus | 1 | White | March. |
| Œnothera frazerii | 1½ | Yellow | May—October. |
| ,, glauca | 2 | Yellow | do. |
| ,, speciosa | 1 | White | March—Septemb. |
| ,, fruticosa | 3 | Yellow | June—September. |
| Pœonia albiflora | 2 | White | May—June. |
| ,, rubescens | 2 | Pink | do. |
| ,, whitleji | 2 | Double White | do. |
| ,, humei | 2 | Double Red | do. |
| ,, carnescens | 3 | Flesh Colour | April—June. |
| ,, moutan | 3 | Purple | do. |
| ,, ,, papavaracea | 3 | White | do. |
| ,, ,, rosea | 3 | Pink | May—July. |
| Pancratium maritimum | 2 | White | May—July. |
| Papaver orientale | 3 | | May—June. |
| ,, nudicaule | 1½ | Orange | June—August. |
| ,, alpinum | ½ | Yellow | June—July. |
| Parnassia palustris | ½ | White | July—August. |
| ,, caroliniana | ½ | White | May—June. |
| Phlox paniculata | 3 | Pink | August—Sept. |
| ,, suaveolens | 2 | White | July—August. |
| ,, omniflora | 2 | White | July—August. |
| ,, wheelerii | 3 | Flesh colour | July—September. |
| ,, cordata grandiflora | 3 | Pink | July—August. |
| ,, nivalis | ½ | White | April—May. |
| ,, stolonifera | ½ | Red | June—September. |
| ,, carnea | 1 | Flesh colour | August—Sept. |
| ,, amœna | ½ | Pink | June—July. |
| ,, procumbens | ½ | Red | July—August. |
| Polygala chamæbuxus | ½ | Yellow | May—June. |
| Potentilla grandiflora | 1 | Yellow | June—July. |
| ,, atrosanguinea | 1 | Crimson | June—July. |
| ,, Hopwoodiania | 2 | Yellow | May—July. |

| | HEIGHT. FEET. | COLOUR. | DURATION OR TIME OF BLOOMING. |
|---|---|---|---|
| Potentilla Russelliana | 2 | Crimson | June—July. |
| Primula decora | ¼ | Purple | April. |
| ,, cortusioid s | ¼ | Red | May—July. |
| ,, farinosa | ¼ | Red | June—July. |
| ,, marginata | ¼ | Pink | March—April. |
| ,, auricula | ⅓ | Various | April—May. |
| Rudbeckia pinnata | 3 | Yellow | August—Sept. |
| ,, purpurea | 5 | Purple | July—October. |
| ,, digitata | 6 | Yellow | August—Sept |
| ,, columnaris | 3 | Yellow | August—Sept. |
| Silene acaulis | ⅛ | Pink | June—August. |
| ,, viscosa | 2 | Red | July. |
| ,, quadridentata | ¾ | White | May—July. |
| Smilacina borealis | 1 | White | May—June. |
| ,, bifolia | ¼ | White | May—June. |
| ,, umbellata | ¾ | White | May—June. |
| Soldanella alpina | ¼ | Purple | April. |
| ,, clusii | ¼ | Purple | April. |
| Solidago recurvata | 2 | Yellow | September—Nov. |
| ,, patula | 2 | Yellow | September—Oct. |
| ,, speciosa | 4 | Yellow | September—Oct. |
| ,, petiolaris | 4 | Yellow | October—Dec. |
| Spiræa filipendula | 2 | White | June—October. |
| ,, ,, plena | 1½ | White | June—October. |
| ,, ,, ulmaria plena | 2 | White | June—October. |
| ,, ,, fol. aurea | 2 | White | June—October. |
| ,, ,, lobata | 2 | Red | July—August. |
| Statice flexuosa | 1 | Purple | July—August. |
| ,, gmelini | 1 | Blue | June—August, |
| ,, latifolia | 1 | Blue | May—July. |
| Thalictrum tuberosum | 2 | White | June. |
| ,, aquilegifolium | 3 | Purple | May—July. |
| ,, cornuti | 3 | White | May—July. |
| Veratrum album | 5 | Yellowish | June—August. |
| ,, nigrum | 3 | Purple | June—July. |
| Veronica gentianoides | 2 | Blue | May—June. |
| ,, incana | 2 | Blue | July—September. |
| ,, montana | ⅓ | Blue | July—August. |
| ,, fruticulosa | ⅓ | Flesh colour | June—August. |

## CALENDAR FOR NOVEMBER.

Stove. Supposing the whole of the plants in this department to be finally arranged for the winter, the cultivator has little more than the ordinary routine to attend to; but every plant should be watched with a jealous eye to detect the least

appearance of decay, or the approach of insects. For the first, immediate pruning is the best remedy; and for the latter, fumigation. If not done last month, let all climbers, whether on pillars, the wall, or rafters of the house, be considerably reduced in size. This should not be delayed, though it may be at the expense of a few flowers, as every ray of light is of the first importance to the plants in the house. The amateur cannot be too cautious in the use of water during this and the next month; the plants generally should be excited as little as possible. The average temperature of the house should be about 55 degrees.

Greenhouse. Among the multitudinous plants usually kept in a greenhouse none repay the little trouble entailed better than ericas, yet none are more impatient of mismanagement, and it is now, if at all, they generally show it. They require to be kept only moderately damp, with all the air possible. Should any of them show signs of mildew, which is principally caused by a confined situation, strew a little sulphur on the parts affected, and remove them to a more airy place. Chrysanthemums are now the chief ornaments of the house; they should be liberally watered every morning, and the foliage occasionally syringed, to keep them clean and healthy: bring in others for a succession as they seem to require it. Annuals for spring flowering should be placed close to the glass; tie up and train their shoots. Soft wooded plants that are growing will be benefited by pinching off the points of their leading shoots. Calceolarias should be kept in a warm, yet light part of the house. Geraniums should be similarly treated: observe that they are free from green fly; if it appears, instantly fumigate them, and repeat it next day. Air should be admitted every mild dry day: if the weather happens to be wet a little fire-heat should be applied to expel damp. Use no more water than is actually necessary.

Flower Garden. The beauty of this department is now fast fading away; but the cultivator, like the seasons, must be ever progressing. The beds and borders should be at once

cleared of everything dead or decaying. Finish planting and potting hyacinths, tulips, crocuses, and other bulbs: those potted for forcing should be placed in a warm border and covered with old tan or decaying leaves. Take up the roots of dahlias as soon as the bloom is over; dry them, and put them away out of the reach of frost. Auriculas should be constantly looked over to remove dead leaves, &c.; give them plenty of air every fine day, and when wet let the lights be tilted, as recommended last month. Picottees and carnations should now be sheltered from rains—this is the only protection they require. Beds of pinks and pansies should have a layer of rotten leaves strewed over them to protect the roots from severe frost; the same should be done for gladiolus and other tender bulbs. Half-hardy plants in frames should have a free supply of air on every favourable opportunity; the points of their growing shoots should be shortened, and constantly remove all decaying matter from about them. Proceed with alterations, as removal of all descriptions of trees and shrubs may now be done with facility: everything of the sort should be expedited as much as possible, as it is most likely the frost of next month will put a stop to operations of this kind. Borders and shrubberies should be top-dressed where they require it, and the whole of them neatly dug over, that they may have the benefit of the winter's frost. The falling leaves should be collected and laid in a heap, as they form a most useful earth, besides answering many other purposes.

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## FLORICULTURAL INTELLIGENCE.

South London Floricultural Society. The last show of this Society for the season took place at the Surrey Zoological Gardens on Tuesday, 13th September. This is usually regarded as the principal show for dahlias near the metropolis. The day was very fine and, as usual, the attendance exceedingly numerous. The Duke and Duchess of Cambridge and party visited the gardens in the afternoon.

The number of Dahlias exhibited was very great, but there appeared a lack of thoroughly good flowers. Mr. Browne's stand of 50, which took the first prize in the nurserymen's class, contained some very fine flowers: they were Amato, Vitruvius, Duchess of Richmond, Indispensable,

ROCHESTER AND CHATHAM HORTICULTURAL SOCIETY. On Tuesday, September 20th, the third and last Exhibition of the season took place in the paddock of D. H. Day, esq. The show of Flowers, Fruit, and Vegetables was remarkably fine. The following prizes were awarded :

*Subscribers' Prizes, 1st Class;* (for gentlemen whose gardens are under the care of a professed gardener.) Best 12 DAHLIAS, selfs, Rev. Dr. Page; 2d best ditto, J. A. Wigan, esq.; best 12 ditto, variegated, J. A. Wigan, esq.; 2d best ditto, Rev. Dr. Page; best single specimen of any sort in pot, Rev. Dr. Page; best 18 distinct varieties, cut flowers, J. A. Wigan, esq.; 2d best ditto, Rev. Dr. Page; 3d best ditto, W. Nicholson, esq. Best 12 AFRICAN MARIGOLDS, J. A. Wigan, esq.; best 12 French ditto, D. H. Day, esq. Best SALVIA, in pot, Rev. Dr. Page. Best 3 PETUNIAS, Rev. Dr. Page. Best 3 varieties of SALPIGLOSSIS, in pot, W. Lee, esq. Best 3 ANNUALS, Rev. Dr. Page. Best collection of stove and greenhouse PLANTS, not exceeding 6, J. A. Wigan, esq.; 2d best ditto, Rev. Dr. Page. Best Bouquet, W. Nicholson, esq.

*Subscribers' Prizes, 2d Class;* (for amateurs whose gardens are not under the care of a professed gardener.) Best 12 DAHLIAS, Mr. Langley; 2d best ditto, Rev. J. P. Alcock; 3d best ditto, Mr. C. Bathurst; best single specimen of any sort in pot, Mr. C. Bathurst: 2d best ditto, Rev. Dr. Curtois; best 12 distinct varieties of cut flowers, Mr. C. Bathurst; 2d best ditto, Mr. Dadson; 3d best ditto, Rev. Dr. Curtois. Best 3 BALSAMS, W. Smart, esq. Best 12 AFRICAN MARIGOLDS, Mr. Caddel. Best 12 French ditto, Miss Boghurst. Best 12 GERMAN ASTERS, — Dodd, esq. Best SALVIA, in pot, Rev. Dr. Curtois. Best 24 HEARTSEASE, Miss Boghurst. Best 3 FUCHIAS, varieties, in pot, Mr. C. Bathurst; 2d best ditto, Mr. Dadson. Best collection of stove or greenhouse PLANTS, not exceeding 6, Rev. Dr. Curtois; 2d best ditto, Mr. C. Bathurst. Best BOUQUET, — Dodd, esq.; 2d best ditto, Rev. Dr. Curtois. Best ditto DEVICE, Mr. Dadson; 2d best ditto, Miss Boghurst..

*Nurserymen's Prizes.* Best 24 DAHLIAS, Mr. J. B. Lamb; 2d best ditto, Mr. G. C. Masters. Best 12 varieties of cut FLOWERS, Mr. Masters.

*Cottagers' Prizes.* Best 12 HEARTSEASE, Ellington. Best NOSEGAY, Nye; 2d best ditto, Baker. Best PLANT, in pot, Eldridge; 2d best ditto, Simpkins; 3d best ditto, Nye. Best DEVICE, Ellington; 2d best ditto, Nye. Best 12 MARIGOLDS, Baker.

*Two Prizes to Workmen exclusively employed in Her Majesty's Dockyard.* Best 12 DAHLIAS, Eldridge; 2d best ditto, Pearce.





SIR ROBERT SALE.

Engraved by A.J. Caird. For the Florists Journal. Dec.r 1843



RIVAL YELLOW.

Engraved by A.Adland for the Florists Journal. Jan.y 1842.

THE

# FLORIST'S JOURNAL.

DECEMBER 1, 1842.

## THE DAHLIAS.

WITH PORTRAITS OF SIR R. SALE AND RIVAL YELLOW.

THE illustrations of these flowers are given at an early period this season, in order to furnish our distant readers who are purchasers of the new dahlias, with a description of some of the best of this year. The subjects of the present plates are two seedlings of 1841, raised by Messrs. Smith of the Cambridge-Heath Nursery, Hackney.

Sir Robert Sale needs no recommendation of ours, it has had great publicity given it during the past season, at all the metropolitan shows besides several provincial, and is admitted to be first rate; this flower and Turvill's Essex Triumph, and Mountjoy's Virgil, are decidedly the finest varieties in their class we have yet seen. Rival Yellow is a flower of which we have high expectations; it has scarcely yet been seen in the perfection we believe it capable of attaining; a good yellow is a flower still much wanted, as there is not one at present that we are acquainted with which can be depended on: of Rival Yellow we have a high opinion. In no former season do we remember the difference so striking between the country growth of dahlias and those grown in the immediate neighbourhood of the metropolis; the latter have been subjected throughout the greater part of the season to the annoying and destructive attacks of the thrip, and though the effects of these pestiferous insects may have been felt in some parts of the country, the majority of cases occurred in the vicinity of London, and in addition to this the

metropolitan growers have always to contend with a smoky and impure atmosphere, the necessary consequence of which is a languishing sickly growth, and deteriorated bloom, so that when exhibited against flowers which have the advantage of pure air, the difference is much against them; this we believe to have been a principal cause that our present subject has not, during the past season, arrived at that preeminence we think it capable of attaining when under the influence of a better situation; by this we mean a greater number of perfect flowers will be obtained.

We should be much pleased to see the attention of cultivators more extensively directed to the improvement of striped and tipped flowers; this class offers a fine opportunity, and much may be done in it; some advancement has been made by a few spirited growers, but nothing like perfection presents itself. We cannot account for this lamentable deficiency on any other ground than inattention, for even the few now grown in their present rough state are not devoid of beauty, and this class admits of every possible degree of variety. Why self-coloured flowers should be cultivated even to exclusion, we cannot divine; there may be a difficulty in procuring good stripes or clear and distinct tips, combined with the form now so thoroughly essential, but this difficulty is to be overcome by the same means that the present beautiful race of entire coloured flowers was obtained. We therefore strongly recommend them to the notice of all interested in this indispensable flower; the best we have seen this season (of this description,) are Messrs. Smith's Rainbow, and Mr. Mitchell's Beauty of Sussex. EDITOR.

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## PROTECTION OF PLANTS FROM FROST.

As we are now in the midst of winter, a few cautionary hints as to the proper guarding against and repelling attacks from frost may not be out of place.

Our first remarks will apply to plants growing in the open air. The prevailing error in the protection of plants in this situation is too close covering. It is usual with such plants as

Magnolias, Photinias, &c., when standing in an isolated position to wrap them closely about with single, double, or triple mats, folding them tightly round the plant; this is erroneous for the reason we pointed out some little time back; it is far better to allow the bottom of the covering (let the material be what it may,) project two or three feet beyond the circumference of the plant, as from the space so covered a constant radiation of heat is going on in an upward direction, which forms a strong repellant to the outward cold. So in the case of similar plants trained to a wall or other place, mats are nailed to the top, and securely fastened close to the bottom of the trellis, here also it would be preferable to continue the covering from the top of the plant in a slanting direction, to the extent of a yard beyond the base of the wall, or even if sufficient space could be afforded to unfasten the plant, and spread it in a horizontal position on or near the ground, and so cover it; this is only practicable in a few cases, but plants so treated would be surrounded by an atmosphere quite as warm as though they were located in a greenhouse. It would be necessary to place the covering in such a manner as to throw off any accumulation of snow or very heavy rains, as the first might probably crush the plant, and the latter render the air about it much colder. Another point of much consequence is the danger incurred from too long a continuance of the covering, as also too hasty a removal: the first is to be avoided because of its weakening effect on the constitution of the plant, and the latter from the danger of a sudden transition from a dark and heated atmosphere, to the immediately opposite, as the confined state of the plant necessarily causes a relaxation of fibre, anything but favorable to it in its changed position. The action of frost on vegetable life may be familiarly explained in this way, the pores of the plant are from some pre-exciting cause, such as we have just mentioned, charged with too great a quantity of sap; this fluid acting as a conductor, attracts a larger share of cold than would otherwise surround the plant, and in the mechanical action of freezing is enlarged, and so causes a disruption of the whole tissue of the plant.

It should be borne in mind that plants under a covering of the kind mentioned, are subject to a very even and medium

temperature so that any sudden transition from it must be injurious either from exciting or repelling causes; and having spoken of the last, we will endeavour to explain or point out the opposite danger, that of too sudden exposure to the sun's rays. In this case the plant being predisposed from its confinement to the production of sap, on being exposed to the exciting influence of the sun immediately proceeds to the elaboration of more fluid, and in a very short time is surcharged at all points; in this state it is probably again covered up, and from the presence of so much aqueous matter a chill, if we may so speak, strikes through its entire frame, and if the subsequent weather happens to be severe, such sap being crude and ill digested becomes frozen, thus proving the cause, of the effect before described; so that the covering which may have been continued for any length of time, should be removed at short intervals, and by gentle degrees, always using the precaution of slightly shading the plants when first uncovered; and this precaution is very necessary when any plant, either in the open air or under glass has happened to get frosted, and should be continued until it is thawed, for the sun acting upon the thin coating of ice spread over the leaves of the plant, acquires nearly as much force as though shining through a lens; the effect of this was fully shown by our respected correspondent Mr. Hally in his article on Camellia, to which we refer. If a slight frost chance to enter the greenhouse, some advantage may be gained by syringing the plants with cold water before the sun is upon them, and afterwards shading the house until the plants are dry, which may be hastened by fire heat. EDITOR.

## ON SUSPENDING PLANTS.

SIR,—Allow me to offer a few remarks on this method of ornamenting plant structures. I have many times been struck with the awkward appearance of trailing plants when fastened in an upright position to sticks or trellis; it has a strained and unnatural look, when the same plants by the application of a little

tasteful management may be made to form most beautiful objects; every one admires the picturesque appearance of those lovely inhabitants of a sunny land the Orchidaceæ; the effect is produced by their uncommon arrangement, being either suspended on blocks from the roof of the house, or growing in baskets of wire or other material, and the almost total absence of pots, but their great price and the expense of keeping them, militates much against their becoming general. Yet the same effect may be procured, and that with some of the commonest plants to be found in any greenhouse; no tribe of plants is better suited for this purpose than the Cactaceæ; all the decumbent species are peculiarly suited to it. I may mention Epiphyllum, Macoyi and speciosa, Cactus truncatus, Cereus mallisonia, and flagelliformis; these occur at the moment, and there are several others. Small rustic baskets or vases should be selected in which to suspend the plants, or rough blocks of wood may be hollowed to receive such as are not parasitical, but on no account should the common garden pots be tolerated, as in such a situation they would be quite out of place, and an eyesore. The proper soil must of course be given to each plant, with this addition, a thin layer of moss should be placed round the inside of each basket that is made of thin materials, to protect the roots from the sun; if the baskets are of wire, sufficient moss is required to keep the earth from falling through, but if made of rough wood very little is necessary. The plants may be arranged at different heights according to the taste of the owner, with this exception, plants having small or delicate foliage should be placed lower or farther from the glass than those having large or thick fleshy leaves. Some consideration is necessary as to their relative habits, if of an alpine character or from exposed rocks or plains, as in the case of cacti, they will bear exposure to the heat of a midsummer's sun, to a far higher degree than such as may be natives of forests, for these a shaded situation should be chosen: for examples of the latter I may mention Russelia juncea and Manettia glabra, which form beautiful objects treated in this way, if allowed a good supply of water while growing; several species of Ipomea are very handsome when suspended and festooned in various directions; the genus Kennedia offers many

interesting subjects beside many other plants not needful to name, and in the selection of which the cultivator must be left to exercise his own judgment; yet cacti, from their grotesque habits, will present themselves to his notice first, and if advantange is taken of grafting one species or variety on another, a succession of curious and beautiful objects will be obtained. In the preparation of plants for this purpose, good, healthy, and strong-rooted specimens should be selected, and they should be placed in their respective baskets or vases at about the present time, that they may become thoroughly established before the blooming season, when particular attention should be paid that they receive sufficient water, as from their direct exposure to the sun the moisture contained in the earth about them speedily evaporates; this may be obviated in some instances by fixing a vessel holding water by the side of the plant, and from the neck of the water-vessel conduct a piece of woollen cloth to the earth of the plant; one end of the cloth to be placed in the water, and the other on the earth,—a constant moisture is thus imparted to the roots of the plant, through the cloth; however, in my estimation the little extra trouble occasioned is amply repaid by the varied and graceful beauty imparted to the collection.

G. REDDING.

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## ON THE RUSSELIA JUNCEA.

WE have been requested by a correspondent to state the best method of treating the Russelia juncea, in order to induce a vigorous growth and fine bloom, and we proceed to do it to the best of our ability, freely confessing at the outset that we have always found it a difficult plant to flower, not but that on a moderately sized specimen the flowers might number two hundred, still that is not what we think it capable of producing. There are various opinions as to which is the best treatment; some cultivators consider a continuous growth encouraged by constant stimuli, or what is technically called growing it hard, to be the best; others have a contrary method, namely, the flowering state is brought about by a check, such as after getting the plant

into a free growth in the stove, they suddenly remove it to the open air, each of these opposite means may occasionally arrive at the desired end, but neither are founded on any physiological principle. In its native state, the Russelia is a jungle plant of South America, and its most natural, and consequently most proper treatment is a seasonal one. Young plants are easily obtained from cuttings, and supposing them to be struck some time in the early part of the spring, every endeavour to encourage them in a healthy growth should be made use of through the whole of the succeeding summer, and by the end of autumn they will have attained a good size, then let them be gradually dried off, not so absolutely dry as is required for bulbous-rooted plants, but to an extent sufficient to stop all possibility of a second growth; in this state they should continue through the winter, and on the return of genial weather the usual stimuli should be applied, when an extremely vigorous growth will be the result. A few blooms will most likely be produced the second summer, and if the same treatment is persevered in the third season will see the plants in perfection. This has been our mode; but if any of our friends have a better to offer we shall be most happy to receive it; the hybernation of plants we believe to be most beneficial to them, and another great advantage is derived from a proper attention to it; the management of every description of plant is thus rendered much easier, and all difficulties and danger of losing them from damps, frost, and other causes incidental to the winter months is entirely removed, and for these very cogent reasons we advise every cultivator to avail himself of its many advantages.

EDITOR.

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## WINTERING CARNATIONS.

"NOTWITHSTANDING many have taken in hand to write upon this subject professedly for the benefit of others, it seemeth good to me also."

I perfectly agree with Philo-Caryophyllus in your last Number, (35,) as to keeping his plants freely exposed to the air; but not

for the purpose of producing a dwarf habit, for I have often found that short bushy plants have either, from holding wet in them or harbouring small snails, been eaten or rotted off just above the ground. I agree with him in removing the layers to shelter about the middle of November, or sooner or later as the season may dictate, but I differ with him entirely as to preparing the floor of his winter quarters, for I hate coal-ashes or coal-slack to be near my garden, if likely to get into it; I consider either of them as nearly poison to vegetation in a garden, and only fit to plough into stiff soils, or be spread upon a boggy meadow. I always use saw-dust for that purpose, but even that is a very poor, though harmless thing to get among your soil. I approve of his shed, under which I would raise a temporary pit with loose bricks or boards two feet high at the back, sloping to twenty inches in front, and nearly fill it up with saw-dust, to place the pots upon for the convenience of occasional examination, watering, &c., and would recommend a curtain made of rice-bags sewed together, which can be procured at the grocer's, to be occasionally made secure round the open front and sides of the shed, in case of violent winds or severe frost; a curtain of this sort will admit plenty of air, and pretty well protect them from injury in either case; but I consider nothing equal to a cold frame with the glasses always raised five or six inches through the winter; and in severe frost cover with mats, but never shut the glasses down close; in all tolerably mild and fair weather I let them be uncovered and entirely open to the air.

Having gone thus far, I will now give my plan of *preparing* plants for wintering. Laying carnations may do very well for home distribution, but the slender bit of stem that is generally left for the roots to strike from, is often very much in danger of being broken, I have, however, lost many valuable plants that have been sent me from a distance from that cause; and as an amateur of long experience I shall never lay carnations. I consider piping a far superior mode of propagation, and I do not recollect losing a single plant that has been raised by piping, through the most severe winter, in the open garden without any sort of protection, except tying them to a small stick to prevent

the violent winds from bruising or breaking them off; but I always shelter them in winter except a few on the borders.

My plan of operation is as follows:

I have octagon-shaped striking glasses, nine inches diameter, five inches deep at the sides, and raised at the top an inch and three quarters they have lead frames, are made as air-tight as possible, and cost me eighteenpence a-piece; and for which I have pots, that the glasses will reach over a full inch all round, say seven inches wide, by four and a half inches deep outside measure.

In the first and not later than the second week in June, having provided some light and tolerably rich soil, such as we generally use for potting, I prepare my pipings in the following manner: I take them carefully from the mother plant by cutting not stripping them from the stem, and take particular care to keep each sort labelled and tied together, in order to have them distinctly separate; I then begin my work, by cutting them off horizontally, just below about the third joint, not where the wood is tender or very juicy, and then strip the two side leaves at that joint where a small bit of the heart or pith will appear below the joint, this I cut off also, and pinch off the two next leaves above, shortening the top leaves a little; the piping is then complete.

I prepare all my pipings in this manner before I plant one of them, and if they are laid upon the ground in the shade, they will be none the worse for remaining there till the next day, or longer if required, I like them to wither a little; I then fill my pots, and with a small taper stick make six or eight holes round each, according to the slender or robust habit of the sort, pretty near but not close to the side, or you can thrust each piping in about two inches if you prefer it, gently pressing each piping with the soil towards the side of the pot, with your finger as you proceed; fill up and level the tops of the pots, and plunge them about two thirds of their depth in a nice dry border, lying to the morning sun, and where that glorious luminary will leave them about one o'clock, rake your border smooth and level round the pots, and water them through a rose properly made, that you can saturate each pot, without *wetting the leaves of the*

*plants*, this must be carefully avoided. Also water the borders round each pot, rather farther than the compass of each glass, then gently press your glasses over each, and this completes the operation.

If the weather be very hot I generally throw a light thin cover over the glasses, from about ten till the sun leaves them at one, and take off the glasses early in a morning, once in five or six days, just as I find it necessary to water them as before; being careful to rake the glass mark pretty well out, the better to make the glasses as air-tight again as possible, by pressing them gently over the pots as in the first instance; this is a very important matter, and must have your particular care. About the middle or end of July you will have fine healthy plants, the leaves curling backwards to the ground, and rooted like a seedling; that will live though the severest winter in the open garden, without any protection at all. At that time I take off the glasses, and remove the pots to a shady part of the garden, to check their growth a little if getting too luxuriant, there to remain ready for planting out, potting, or sending away. By this mode of propagation I calculate on every piping producing me a beautiful plant.

I do sometimes in a convenient place on the border leave six or eight of the outside shoots, or layers of a favorite, for a second year's blooming, not laying them for rooting but pegging them down, equidistant round the old stool; and at the proper time in the spring, I place a neat stick for the support of each flower stem, or in a circle round the stool, at the top of which I fix a light wire hoop to keep the sticks erect and at a proper distance from each other; by this method I have had from 50 to 100 blooms at the same time, upon a single plant.

The foregoing is not intended to call in question the knowledge or judgment as a cultivator of your correspondent Philo Caryophyllus; far from it: but is entirely intended for the advantage of those who do not happen to be acquainted with the matter it contains, and I think P. C. will acquit me of any such intention.

You will confer an obligation on myself and others of your readers if you will give it place in your next number.

*Macclesfield.* SENEX.

## LIST OF NEW PLANTS.

PENTANDRIA MONOGYNIA—*Cinchonaceæ.*

*Rondeletia longiflora.* A native of Brazil, imported by Messrs. Veitch, of Exeter. *R. Odorata* and *R. Speciosa* are well-known inhabitants of our stoves, the present species resembles in some degree *R. Odorata* in its inflorescens, being produced in clusters: "The individual flowers have a tube an inch and a half in length; the colour is a blueish lavender, very deep and exceedingly attractive; there is also a trifling odour when the flowers are perfect." In the cultivation of this plant the most important particular to be observed is the frequent stopping of the young shoots, to prevent the naked appearance so frequently observable in other species of this genus; in other respects it agrees with its congeners. It flowered for the first time in the collection of the nurseryman above named, in July of the present year.—*Pax. Mag. Bot.*

POLYGAMIA MONŒCIA—*Leguminosæ.*

*Acacia biflora.* This is a pretty greenhouse plant, of the capitate division of the genus *acacia*, the flowers being produced plentifully in small round heads. It was originally introduced to this country in 1803, but was subsequently lost and was again made known by Messrs. Low & Co., of Clapton, who imported it about two years back. The plant rises to about three feet in height, of tolerably compact growth, and produces its blossoms for the most part in pairs, as the special name implies. It affects the usual treatment for this class of plants, with the addition of a little timely pruning while young.—*Pax. Mag. Bot.*

ICOSANDRIA, DI-PENTAGYNIA—*Ficiodeæ.*

*Mesembryanthemum tricolor.* This beautiful little and once favorite tender annual has here received a notice calculated to bring it once more to its proper station among the summer ornaments of our greenhouses. The whole family are exceedingly interesting, and this species preeminently so. It was introduced so far back as 1795, but has since been much neglected. It requires the treatment usual for tender annuals, observing to supply it but moderately with water while young. The flowers are

produced in great profusion for several months; the predominant colour of which is a peculiar pale crimson.—*Pax. Mag. Bot.*

PENTANDRIA MONOGYNIA—*Apocyneæ.*

*Echites splendens.* We last month noticed a very splendid species of echites, *E. atropurpurea*, as having been received by Messrs. Veitch from Brazil, and we have now another, still more beautiful, sent by their indefatigable collector, Mr. Lobb, from the same neighbourhood. The flowers of the present species, *splendens*, are produced in large clusters, each one being full four inches across, of a convolvulate form. The colour is deep rose, the throat of the flower partaking of a deeper tint, which is spread out in the manner of a star. The plant may be termed a stove climber, and cannot fail to attract very general admiration.—*Bot. Mag.*

PENTANDRIA MONOGYNIA—*Convolvulaceæ.*

*Ipomea Tweediei.* A rather pretty convolvulaceous plant, somewhat resembling *I. quamoclit.* Received some time back at the Botanic Gardens, Glasgow, from Mr. Tweedie, who found it in the woods of the Parana.—*Bot. Mag.*

DECANDRIA MONOGYNIA—*Ericeæ.*

*Macleania angulata.* An evergreen shrub, of great beauty, from the extensive collection at Woburn, where it was raised from seeds sent by Mr. Maclean from the Peruvian Andes. In general appearance the plant indistinctly resembles a *corea*, though the foliage is less coriaceous. The tube of the flower is about an inch in length, of a bright red, the limb is yellow, the young leaves are very delicate, and have a deep tinge of red.—*Bot. Mag.*

GYNANDRIA HEXANDRIA—*Aristolochiaceæ.*

*Aristolochia gigas.* This genus is remarkable for producing some of the strangest forms observable in any flora, not even excepting orchidaceæ; but of all its strange fantasies this new species perhaps presents the strangest. The plant is a strong growing climber, and is well adapted for covering a trellis in a pot or for training up the rafters of a cool stove. The flower is

blotched and veined all over with livid purple, and is about a foot in diameter, with a pendant lip of about twice that length. In form it may be compared to an elephant's ear turned inside out. It succeeds well if planted in the border of a stove or warm greenhouse, in any free soil. It was found by Mr. Skinner in Guatemala, and also by Mr. Hartweg, who sent it from thence to the Horticultural Society of London, in whose gardens it bloomed during the past summer.—*Bot. Reg.*

HEXANDRIA MONOGYNIA—*Bromeliaceæ.*

*Tillandsia rubida.* A very pretty dry stove epiphyte, nearly related to *T. stricta*, but differing in its bractæ, being scurfy also in the colour of the flowers, which are red. It is a native of Brazil, from whence it was received by Messrs. Loddiges, who flowered it in February last. Suspended in a basket from the back wall or end of a stove it succeeds well.—*Bot. Reg.*

OCTANDRIA MONOGYNIA—*Onagraceæ.*

*Godetia grandiflora.* A beautiful addition to this interesting and useful family of annuals. It resembles *grosea alba*, though the flowers are larger and more delicately pale. Seeds of it were obtained from North-West America by the late Mr. Moreton Dyer, but, unfortunately, none were saved of it since its introduction.—*Bot. Reg.*

## CALENDAR FOR DECEMBER.

STOVE. The necessary increase of fire heat will have a considerable effect on the plants in this department, rather more water will be required to meet the increased evaporation occasioned by it, but care must be used to avoid the opposite extreme, if the effect is made visible on any of the plants by causing them to make new shoots, the points of such as will bear it should be pinched off. In wet weather the cultivator cannot be better employed than in washing and otherwise cleaning the foliage of plants under glass, as much dirt will accumulate in the long confinement of the winter months. A few shrubs and other flowering plants may now be brought in to forward their flower-buds; in selecting these rather choose the commoner kinds, as

the more choice will be the better for another month's preparation. Keep a constant watch for the appearance of insects, and on detecting them, immediately take measures for their destruction; the temperature of the house should average from 55° to 60°.

GREENHOUSE. Pelargoniums, calceolarias, &c. require much attention this month. Keep them perfectly free from decaying leaves, insects, and damp; see that there are no worms in the pots. Cacti and other succulents should be kept dry. Chrysanthemums are now in perfection and should be allowed a liberal supply of water to prolong their flowering. Annuals that have been selected for spring flowers should have a light situation, or they become attenuated, frequently stop growing shoots of soft-wooded plants; our previous remarks respecting insects and the cleansing the leaves of large plants may be applied here; as a general rule, use no more water than is absolutely necessary, advantage may be taken of fine mornings to admit air, though it should be closed again by 3 o'clock P.M. Let 45° be about the average temperature.

FLOWER GARDEN. The protection of trees and plants from frost is now the first consideration; some remarks on the subject will be found in our present Number, to which we refer. See that plants in frames do not suffer from damp, especially auriculas and pansies; these should be frequently examined; remove everything likely to impede a free circulation of air. Hyacinths, tulips, and other bulbs designed for forcing, should be removed a few at a time to a cold frame previous to their being taken into the house, this should be done with every plant it is intended to force as it is then more gradually and naturally inured to the increasing heat necessary to an early bloom, proceed with digging of borders and alterations while the weather is favorable. Perennial and other herbaceous plants may still be removed and increased by division where requisite. Dahlia roots should be occasionally examined to prevent them being injured by damp or frost; protect with leaves the beds of tender bulbs, such as gladiolus, &c.; tulips do not require it. As the chrysanthemums go out of flower remove them to a back shed.

## THE LETTER-BOX.

[A correspondent has favored us with the following, which, as it involves a question of much importance, we insert entire, that previous to our making any reply we may elicit a few remarks from some of our correspondents who may have witnessed this curious but not uncommon phenomena; satisfied that we cannot do better at this season than call particular attention to it.]

Sir,—A friend of mine has got a remarkably healthy and vigorous growing plant upon a southern exposure, of the yellow rose called multiflora: every season it has a great number of flower-buds, none of which ever expand; they grow to a large size when the green leaves or calyx drop down, but the petals never expand; can you or any of your correspondents inform me of anything that can be done to it in order to rectify the above defect? In so doing you will oblige your obedient servant,

W. BANKIER,

*Glasgow*, 38, *George Square: 29th Oct.* 1842.

Florista. We cordially agree with our correspondent that experiment is the soul of amateur operations, but it unfortunately often happens to be the grave of his hopes, simply because it is too frequently overdone, especially in the use of artificial manures. In the application of salt, nitrate of soda, guano, and such strong stimulants the greatest caution is necessary. The first two are useful if applied moderately, but guano, we believe, (so far as our experience goes) to be of too strong a nature to admit of its being used in pot culture. A quarter of an ounce of nitrate of soda dissolved in a gallon of water would be far too strong for either geraniums or calceolarias. The same quantity of nitrate in four gallons of water would be sufficient to begin with, and may be applied once a week from the end of February.

A Lady. The following plants are of easy culture, and will afford a continuous bloom in a greenhouse nearly through the whole year: Acacia armata Azalea indica alba and lateritia, Chorizema varium cordata and Dicksonii, Epacris impressa, grandiflora, and nivalis,. Genista canariensis; Sollya heterophylla, Manettia glabria, Boronia serrulata, Pimelea decussata, Coleonema tenuifolia, Primula sinensis, Fuchsias, Salvias, Pelargoniums, Calceolarias, and Chrysanthemums in varieties may be added.

An Amateur. To your collection of Ericas we advise you to add E. Aristata, Massoni, Boweana, Eximia ampullacea, Hartnelli, Grandinosa Ventricosa superba, trossula, and elegans.

T. S. Calceolarias require to be kept in a light airy part of the greenhouse; the front shelves are usually assigned them, and air should be given at favorable opportunities, always closing the sashes at an early hour, say 2 o'clock, through the winter; the supply of water should be limited, giving it in small quantities only when they appear dry.

X. need not remove the plants of Fuchsia coccinea and ricartonia, as they will survive the winter in the open ground if pruned close to the old wood and a little mulch or decaying leaves placed over the roots; the best stocks for blooming in pots are the German varieties and the scarlet intermediate, the seed of which may be sown early in February in pans and placed in a gentle hotbed; pot them when about two inches high into small pots and continue them in a frame till they are four or five inches in height, then repot them into the pots they are intended to bloom in.

Lancastriensis. The culture of Lachenalia tricolor is very simple; pot the bulbs at once, using peat if procurable, or well-rolled leaf-mould; place three roots in a 48-sized pot, and keep them in a greenhouse or the window of a sitting-room; water them moderately as they require it.

Sir,—In your last and preceding Numbers you have given a valuable list of the most ornamental "Hardy Herbaceous Plants," which I have no doubt has been well received by your readers; and equally so would be a similarly selected list of Greenhouse Plants suitable to the general cultivator. I have long been (with many friends) looking for such a means of guiding my purchases without meeting therewith, and am therefore induced to make this solicitation, should it accord with your convenience to afford such assistance. I am, Sir, your very obedient servant, W. B.

*Rochester; 9th Nov.* 1842.

[W. B.'s request shall be complied with at the earliest opportunity.]

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## FLORICULTURAL INTELLIGENCE.

Anglesea Horticultural Society, Aug. 26. The annual show of flowers, fruit, and vegetables, was held at Beaumaris, and attracted a numerous company. The following prizes were awarded:

Orchidaceous Plants: 1, Epidendrum elongatum, H. Beaver, esq.; 2, Cymbidium Aloifolium, Sir R. Bulkeley.

STOVE PLANTS: 1, Russellia juncea, Sir R. Bulkeley; 2, Russellia juncea, H. Beaver, esq.; 3, Humea elegans, H. Beaver, esq.

GREENHOUSE PLANTS: 1, Sir R. Bulkeley: 2, Bishop of Bangor; 3, H. Beaver, esq.

TENDER ANNUALS: 1, Phlox Drummondi, H. Beaver, esq.; 2, Clintonia elegans, Bishop of Bangor.

HARDY HERBACEOUS PLANTS: 1, Gladiolus floribundus, J. Williams. esq.; 2, Statice latifolia, Bishop of Bangor; 3, Penstemon Richardsonii, Sir R. Bulkeley.

HALF HARDY SHRUBS: 1, Fuchsia fulgens, H. Beaver, esq.; 2, Fuchsia fulgens, Sir R. Bulkeley.

DAHLIAS: 1, Bishop of Bangor; 2, H. Beaver, esq.; 3, ditto; 4, Mr. Batley; 5, Rev. W. Trevor.

*Single Dahlias*, 1, Mr. Batley; 2, Bishop of Bangor.

BOUQUETS: 1, Sir R. Bulkeley; 2, H. Beaver, esq.; 3, Mrs. Weldon.

PELARGONIUMS: 1, Sylph, Sir R. Bulkeley; 2, Joan of Arc, Sir R. Bulkeley; 3, Conservative, Sir R. Bulkeley.

ERICAS: 1, Erica Hartnelli, H. Beaver, esq.; 2 and 3, Erica Hartnelli, R. M. Preece, esq.

BALSAMS: 1, Sir R. Bulkeley; 2, H. Beaver, esq.; 3, Sir R. Bulkeley.

COCKSCOMBS: 1, Hon. Major Vivian; 2 and 3, Sir R. Bulkeley.

Best 4 PELARGONIUMS: H. Beaver, esq.

Best 3, Bishop of Bangor.

AYLESBURY HORTICULTURAL SOCIETY, Sept. 8th. The annual meeting was held in the County-hall, Aylesbury, where the prizes were awarded as follows:

DAHLIAS: 1, Mr. Soden, for Admirable, Indispensable, President of the West, Pickwick, Grace Darling, Springfield Rival, Maria, Phenomenon, Conservative, Conqueror of the Plain, Bridesmaid, and Fanny Keynes; 2, Mr. Harwood, for Admirable, Conservative, President of the West, Grace Darling, Hudson's Princess Royal, Springfield Rival, Lewisham Rival, Pickwick, Maria, Eclipse (Widnall's), Conductor, and Burnham Hero; 3, Mr. H. Sheriff, for Andrew Hofer, Charles XII, Widnall's Queen, Lewisham Rival, Rouge et Noir, Admirable, Hope, Essex Rival, Rienzi, Beauty of the Plain, Conservative, and Nicholas Nickleby; 4, Mr. I. K. Fowler, jun., for Ruby, Lady Middleton, Lewisham Rival, Suffolk Hero, Phenomenon, Unique, Defender, President of the West, Rienzi, Pickwick, Bridesmaid, Horwood's Princess Royal.

Mr. Horwood exhibited some blooms of his *Seedling Princess Royal* which were greatly admired.

CAMBRIDGESHIRE HORTICULTURAL SOCIETY, Sept. 21st. The anniversary show took place in the Town-hall, Cambridge. The following Prizes were awarded:—

Best 12 DAHLIAS: Medal. 1, Widnall's Conductor, Eclipse, Marchioness of Exeter, Stella, Osgar, Queen, Catleugh's Eclipse, Tournament, Prince of Wales, Duchess of Richmond, Nicholas Nickleby, Hudson's Princess Royal—Mr. Widnall; 2, Catleugh's Eclipse, Henrietta, Duchess of Richmond, Parson's Rival, Dodd's Prince of Wales, Wheeler's Maria, Brown's Marquis of Lansdowne, Nicholas Nickleby, Grande Baudine, Whale's Standard, Mrs. Stanley—Rev. W. Skynner; 3, Hudson's Princess Royal, Hall's Westbury Rival, Phenomenon, President of the West, Dodd's Prince of Wales, Twyford's Perfection, Catleugh's Eclipse, Duchess of Richmond, Grande Baudine, Girling's Indispensable, Widnall's Eclipse, Headly's Phœnix—Mr. J. Headland; 4, Princess Royal, Widnall's Conductor, Ne Plus Ultra, Queen, Eclipse, Catleugh's Eclipse, Lady Cooper, Grande Baudine, President of the West, Indispensable, Phenomenon, Pickwick—Mr. J. Taylor. SEEDLING: 1, Mr. Widnall; 2, Mr. J. Taylor.

CHINA ASTERS: 1, Mr. Taylor; 2, Mr. Headland; 3, Messrs. Hudson.

DOUBLE FRENCH MARYGOLDS: 1, Mr. Boning; 2, Mr. Green; 3, Messrs. Hudson.

AFRICAN MARYGOLDS: Mr. F. B. Smith.

*Mr. Widnall's Prizes* (offered to Amateurs only, for the best 12 Dahlias): 1, Rev. W. Skynner; 2, Mr. J. Taylor; 3 (names not given in), Mr. R. Headly; 4, Wheeler's Maria, Catleugh's Eclipse, Hudson's Princess Royal, Cox's Defiance, Barrett's Beauty of Wakefield, Grande Baudine, Widnall's Ne Plus Ultra, Jeffrey's Climax, Lewisham Rival, Phenomenon, Nicholas Nickleby, Conqueror of the World, Mr. R. Boning.—Numerous Cottagers' Prizes were also given.

CHOWBENT DAHLIA SHOW, Sept. 29th. This exhibition took place at the house of Mr. J. Warburton, the Bear's Paw Inn, Chowbent. The following is a list of the Prizes:

*Nine blooms:* 1, President of the West, Lewisham Rival, Harwood's Princess Royal, Lee's Bloomsbury, Pickwick, Springall's Conqueror, Hope, Maid of Bath, Grace Darling—Mr. J. Openshaw; 2, Diana, Unique, Lewisham Rival, Pickwick, Catleugh's Eclipse, President of the West, Hope, Springall's Conqueror, Bridesmaid, Lord Sandon, Argo, Advancer, Egyptian Prince, Lewisham Rival, Grace Darling, Pickwick—C. J. Darbishire, esq.; 3, Invincible, Lee's Bloomsbury, Conservative, Pickwick, Hope, President of the West, Rival Sussex, Lady Flora, Admirable—Mr. T. Boardman.

*Four blooms:* 1, Harwood's Princess Royal, Hope, Lewisham Rival, Grace Darling—Mr. J. Openshaw; 2, Lady Flora, Maria, Rouge et Noir, Pickwick—Mr. Halliwell; 3, Ne Plus Ultra, Argo, Lewisham Rival, Rouge et Noir—C. J. Darbishire, esq.

In Classes—*Maroon:* 1, Rouge et Noir, Mr. J. Openshaw; 2, Rival Sussex, C. J. Darbishire, esq.; 3, Sussex Rival, Mr. Selby; 4, Sussex Hero, Mr. J. Openshaw; 5, Bontishall, Mr. Boardman; 6, Egyptian Prince, ditto.

*Crimson:* 1, President of the West, Mr. Halliwell; 2, Victory, Mr. Gregory; 3, Burnham Hero, C. J. Darbishire, esq.; 4, Andrew Hofer, Mr. Selby; 5, Mungo Park, ditto; 6, Springfield Rival, Mr. Boardman.

*Yellow:* 1, Princess Royal, Mr. J. Openshaw; 2, Argo, Mr. Gregory; 3, Unique, Mr. Halliwell; 4, Premier, Mr. Gregory; 5, Sulphurea elegans, Mr. Halliwell; 6, Topaz, Mr. Selby.

*Purple:* 1, Optima, C. J. Darbishire, esq.; 2, Pickwick, Mr. Halliwell; 3, Amato, Mr. Boardman; 4, Constancy, Mr. Halliwell; 5, Euclid, C. J Darbishire, esq; 6, Ne Plus Ultra, Mr. Gregory.

*Red:* 1, Regina, Mr. Halliwell; 2, Hylas, Mr. Halliwell; 3, Eclipse, C. J. Darbishire, esq.; 4, Mrs. Neeld, C. J. Darbishire, esq.; 5, Tam O'Shanter, Mr. Selby; 6, Redgauntlet, Mr. Gregory.

*Tipped or Edged;* 1, Maid of Bath, Mr. J. Openshaw; 2, Phenomenon, Mr. Selby; 3, Bridesmaid, Mr. J. Openshaw; 4, Lancashire Witch, Mr. Selby; 5, Lady Flora, Mr. Boardman; 6, Diana, Mr. Scowcroft.

*Rose;* 1, Hope, C. J. Darbishire, esq.; 2, Miss Johnson, Mr. J. Openshaw; 3, Conservative, Mr. Boardman; 4, Fanny Keynes, Mr. J. Openshaw; 5, Wheeler's Maria, ditto; 6, Widnall's Queen, C. J. Darbishire, Esq.

*White*; 1, Lewisham Rival, Mr. J. Openshaw; 2, Eva, Mr. Unsworth; 3, Queen Dowager, Mr. J. Openshaw; 4, British Queen, Mr. Gregory; 5, Queen Victoria, Mr. J. Openshaw; 6, Virgin Queen, Mr. Unsworth.

*Lilac:* 1, Lady Middleton, Mr. J. Openshaw; 2, Countess of Pembroke, Mr. Boardman; 3, Bree's Rosa, ditto; 4, Queen of Beauties, Mr. Gregory; 5, Brown's Beauty, C. J. Darbishire, esq.; 6, Lilac Perfection, Mr. Gregory.

*Scarlet:* 1, Bloomsbury, Mr. J. Openshaw; 2, Lord Sandon, Mr. J. Openshaw; 3, Windsor Rival, C. J. Darbishire, esq.; 4, Tournament, C. J. Darbishire, esq.; 5, Angelic, Mr. Boardman; 6, Fireball, Mr. Unsworth.

*Orange or Buff:* 1, Grace Darling, Mr. Gregory; 2, Duchess of Richmond, Mr. Openshaw; 3, Pamplin's Bloomsbury, C. J. Darbishire, esq.; 4, Striped Perfection, Mr. Selby; 5, Nicholas Nickleby, C. J. Darbishire, esq.; 6, Grande Baudine, Mr. Selby.

*Globe:* 1, Crimson, Mr. Selby; 2, Rose, Mr. Halliwell.

ECCLESTON FLORAL AND HORTICULTURAL SOCIETY, Sept. 15. This meeting was held in the village school, when Prizes were awarded to the following exhibitors.

DAHLIAS—*Best Pan of* 12: Mr. H. Foy, for Maid of Bath, Phenomenon, Queen, Pickwick, Rouge et Noir, Essex Rival, Conservative, Argo, Windsor Rival, Don John, Lewisham Rival, and Suffolk Hero.

*Best Pan of* 10: Mr. T. Banister, for Maid of Bath, Queen, Charles the Twelfth, Don John, Suffolk Hero, Maria, Pickwick, Windsor Rival, Unique, and Hope.

*Best Pan of* 6: Mr. J. Wiggans, for Pickwick, Lewisham Rival, Duke of Cornwall, Homer, Bloomsbury, Essex Rival.

*Best* 6—*Maiden Growers:* Mr. H. Plumb. Best Dahlia of any colour, Mr. H. Foy, Essex Rival.

*Maroon:* 1, Mr. H. Foy, Essex Rival; 2, Mr. H. Foy, Stanford's Contender; 3, Mr. R. Norris, Suffolk Hero; 4, Mr. T. Banister, Lord Dudley Stuart; 5, Mr. R. Scott, gr. to the Rev. W. Yates, Egyptian Prince.

*Purple and Puce:* 1, Mr. H. Foy, Pickwick; 2, Mr. H. Foy, Constancy; 3, Mr. R. Sephton, Climax; 4, Mr. J. Wiggans, Bishop of Winchester; 5, Mr. J. Wiggans, De Vere.

*Shaded and Striped:* 1, Mr. T. Banister, Rouge et Noir; 2, Mr. H. Foy, Nottingham Hero; 3, Mr. R. Scott, Grande Baudine; 4, Mr. T. Banister, Mrs. Newby; 5, Mr. H. Foy, Rosetta.

*Tipped and Edged:* 1, Mr. H. Foy, Phenomenon; 2, Mr. R. Norris, Beauty of the Plain; 3, Mr. H. Plumb, Maid of Bath; 4, Mr. R. Norris, Lady Bathurst; 5, Mr. T. Banister, Glory of Plymouth.

*Crimson and Rose:* 1, Mr. H. Foy, King of the Roses; 2, Mr. J. Heys, President of the West; 3, Mr. W. Wright, Springfield Rival; 4, Mr. R. Norris, Maria; 5, Mr. H. Moon, Rienzi.

*Orange and Buff:* 1, Mr. R. Norris, Nicholas Nickleby; 2, Mr. H. Foy, Duchess of Richmond; 3, Mr. R. Norris, Grenadier; 4, Mr. H. Foy, Grace Darling; 5, Mr. T. Banister, Monarch.

*Yellow and Sulphur:* 1, Mr. J. Wiggans, Cox's Defiance; 2, Mr. H. Foy, Argo; 3, Mr. H. Foy, Don John; 4, Mr. T. Banister, Unique; 5, Mr. R. Sephton, Mary.

*Lilac and Light Rose:* 1, Mr. H. Foy, Bedford Rival; 2, Mr. H. Foy, Queen; 3, Mr. H. Foy, Conservative; 4, Mr. H. Foy, Countess of Pembroke; 5, Mr. J. Heys, Madonna.

*Scarlet and Red:* 1, Mr. H. Foy, Windsor Rival; 2, Mr. H. Foy, Bloomsbury; 3, Mr. H. Foy, Hylas; 4, Mr. R. Scott, Scarlet Defiance; 5, Mr. R. Scott, Scarlet Eclipse.

*White and Blush:* 1, Mr. R. Norris, Eva; 2, Mr. J. Heys, Lewisham Rival; 3, Mr. J. Wiggans, Marchioness of Lansdowne; 4, Mr. H. Plumb, Green's Wonder; 5, Mr. Norris, Blandina.

PANSIES, *Sixteen Varieties:* Mr. J. Wiggans.

*Twelve varieties*: Mr. Wiggans.

*Eight varieties:* Mr. R. Scott.

PELARGONIUMS: 1 and 2, Mr. W. Chamberlain, gr. to C. Scarisbrick, esq.; 3, Mr. R. Norris; 4, Mr. W. Chamberlain.

GREENHOUSE PLANTS: 1, Mr. R. Scott, Fuchsia corymbiflora; 2, Mr. R. Scott, Fuchsia elegans; 3, Mr. R. Scott; 4, Mr. R. Scott, Fuchsia Standishii; 5, Mr. R. Scott, Cockscombs.

HARDY HERBACEOUS PLANTS: 1, Mr. J. Wiggans; 2, Mr. R. Scott, Salvia patens; 3, Mr. R. Norris, Lobelia fulgens; 4, Mr. R. Norris; 5, Mr. R. Scott.

EVERTON AND KIRKDALE FLORAL AND HORTICULTURAL SOCIETY, Sept. 27. The last meeting of the present year took place in the Marquee at the back of Mr. New's Hotel, Kirkdale. The following is a list of the successful competitors:

DAHLIAS: *Best pan of* 12 *blooms*, 1, Mr. S. Knight, for Keynes' Constancy, Maid of Bath, Catleugh's Tournament, Bree's Rosa, Lady Harland, Rouge et Noir, Prince of Wales, Sir J. Astley, President of the West, Phenomenon, Conservative, and Princess Royal; 2, Mr. S. Knight, for Robespierre, Catleugh's Tournament, Lady Cowper, Sparry's Admirable, Amato, Lewisham Rival, President of the West, Indispensable, Hedley's Phœnix, Maria, Princess Royal, and Widnall's Eclipse.

*Best Pan of* 9 *blooms:* 1, Mr. S. Knight, for Phenomenon, Grace Darling, Catleugh's Tournament, Conservative, Yellow Defiance, Rienzi, Princess Royal, Maria, and Beauty of the Plain; 2, Mr. S. Knight, for Upway, Rival, Maid of Bath, Catleugh's Tournament, Lady Middleton, President of the West, Pickwick, Grande Baudine, Argo, and Fanny Keynes.

*Best Pan of* 6 *blooms:* 1, Mr. S. Knight, for Pickwick, Maria, Prince of Wales, Rouge et Noir, Euclid, and Exquisite; 2, Mr. S. Knight, for Lee's Bloomsbury, Virgin Queen, Highgate Rival, Duchess of Richmond, Bishop of Salisbury, and Lady Cowper.

NURSERYMEN'S PRIZES: *Best* 36 *blooms*—1, Mr. W. Lodge, for Garrick, Grande Baudine, Lady Stanley, Twyford Perfection, Pickwick, Duke of Cornwall, President of the West, Prince of Wales, Lady Cowper, Defender, Bedford Surprise, Mary Jane, Andrew Hofer, Princess Royal, Constancy, Westbury Rival, Catleugh's Eclipse, Maria, Burnham Hero, Maid of Bath, Catleugh's Tournament, Lady Harland, Lee's Bloomsbury, Lewisham Rival, Candidate, Duchess of Richmond, Beauty of the Plain, Euclid, Scarlet Defiance, Phenomenon, Grace Darling, Madame Mortier,

Suffolk Hero, Henrietta, Robespierre, and Optime; 2, Mr. T. Davies, for Regina, Queen of Beauties, Attila, Duke of Richmond, Euclid, Rose Unique, Lewisham Rival, Rouge et Noir, Triumph, Marchioness of Lansdowne, Seedling, Virgin Queen, Bedford Surprise, Buff (unknown), Miracle, Constancy, Winterton Rival, Prince Albert, Hon. Miss Scott, Lady Glentworth, Rienzi, Maid of Bath, Mary Jane, Lee's Bloomsbury, Penelope, Pickwick, Henrietta, Fanny Keynes, King of Roses, Emperor of China, Tournament, Lady Cowper, President of the West, Burnham Hero, Highgate Rival, and Curate.

MAIDEN GROWERS, 6 *blooms*, 1 and 2, Mr. D. Griffiths. *Seedling Dahlia, raised in* 1842, Mr. D. Murray.

DEVICES OF DAHLIA BLOOMS: 1, Mr. M'Gregor; 2, Mr. W. Skirving.

GLASGOW HORTICULTURAL SOCIETY, Sept. 21. The autumn exhibition of fruits and flowers took place in the Assembly Rooms, where the attendance, exclusive of practical and amateur gardeners, was large and respectable. The prizes were awarded as under:

TRAINED PLANTS. A prize of second value to Mr. C. Ross, gr. Woodlands, for Maurandya Barclayana, Rhodochiton volubile, Verbena teucrioides grandiflora.

TENDER ANNUALS. 1, Mr. G. Weston, gr. to James Dunlop, esq.; 2, Mr. C. Ross.

PENSTEMONS: 1, Mr. J. M'Alpine; 2, Mr. W. M'Diarmid, gr. to J. Hunter, esq.

ANTIRRHINUMS: 1, Mr. W. M'Diarmid; 2, Mr. J. Sinclair, gr. to Jas. Finlay, esq.

DAHLIAS, 24: 1, Mr. J. Sinclair, with Lee's Bloomsbury, Cox's Defiance, Lady Middleton, Metella, Maid of Bath, Pickwick, President of the West, Phenomenon, Marquess of Lorn, Argo, Princess Royal, Highgate Rival, Grande Baudine, Conservative, Royal Standard, Eva, Bishop of Winchester, Beauty of the Plain, Maria, Lewisham Rival, Countess of Pembroke, Burnham Hero, Duchess of Richmond, Optime; 2, Mr. W. Paton, gr. to W. Gilmour, esq.; 3, Mr. Alex. Smith, gr. to W. Forbes, esq., with Emperor of China, M'Kenzie's Perfection, Chef-d'œuvre, Rienzi, President of the West, Metella, Regina, Suffolk Hero, Fair Maid of Clifton, Uxbridge Magnet, Wallace, Grace Darling, Lord Dudley Stuart, Charles XII., Conservative, Marquess of Lothian, Phenomenon, Rouge et Noir, Pickwick, Lee's Bloomsbury, Springfield Rival, Scarlet Eclipse, Hope, Indispensable.

*Twelve varieties:* 1, Mr. J. Murray, gr. to — Cunningham, esq.,

with President of the West, Argo, Pickwick, Phenomenon, Climax, Maid of Bath, Metella, Rienzi, Grande Baudine, Lady Middleton, Wheeler's Maria, Advancer; 2, Mr. J. Sinclair; 3, Mr. F. Small, gr. to H. Dunlop, esq., with Maid of Bath, Hope, President of the West, Climax, Phenomenon, Lewisham Rival, Metella, Pickwick, Optime, Grace Darling, Conservative, Beauty of the Plain.

Bouquet: 1, Mr. J. Tait, gr. to W. Couper, esq.; 2, Mr. C. Ross.

Melon: 1, Mr. J. Monteith, gr. to A. Graham, esq.; 2, Mr. Alex. Smith.

Inverness and Northern Horticultural Society, Sept. 16. This exhibition took place in the Academy Hall, where the following Prizes were awarded:

Dahlias—best 12: 1, Mr. A. Fraser, gr. to J. Thomson, esq. for Beauty of the North, Mrs. Neeld, Exquisite, President of the West, Ward's Mary, Andrew Hofer, Metella, Kentish Glory, Lord Dudley Stuart, Danecroft Rival, Climax (Wildman's), and Hero of Sevenoaks; 2, Mr. A. Macdonald, gr. Kirkhill Manse, for Grace Darling, Ruby, Pickwick, Nicholas Nickleby, Danecroft Rival, Rienzi, Scarlet Defiance, Conductor, Miss Johnston, Rival Sussex, Duchess of Devonshire, and Lilac Perfection. Best Seedling: Mr. Stephen, gr. Ness Castle.

Carnations—best 9: 1, Mr. A Macdonald; 2, Mr. J. Lawrence.

Marygolds: 1, Mr. Westwood, gr.; 2, Mr. Maccullum.

Stocks: 1, Mr. Dallas; 2, Mr. W. Mackenzie.

China Asters: 1, Mr. Stephen; 2, Mr. Mackenzie.

Hardy Annuals: 1, Mr. J. Lawrence; 2, Mr. Westwood.

Balsams: 1, Mr. Dallas; 2, Mr. J. Ross.

Fuchsias: 1, Mr. J. Ross, for F. fulgens, Standishii, globosa, and Youelli; 2, Mr. G. Taylor, for F. insignis, Youelli, racemiflora, longiflora.

Cockscombs: 1, Mr. Bain, gr. Beaufort Castle; 2, Mr. Stephen.

Lobelias, in Pots: Mr. G. Taylor.

Phloxes: 1, Mr. Westwood; 2, Mr. Lawrence.

Hollyhocks: 1, Mr. G. Munro, gr. to A. Mactavish, esq.; 2, Mr. T. Fraser.

Salvias: 1, Mr. A. Fraser, gr. to Mr. Thomson, for S. formosa, chamædrifolia, Grahami, and fulgens; 2, Mr. J. Bain.

Penstemons: 1, Mr. J. Ross; 2, Mr. Dallas.

Antirrhinums: Mr. Bain.

Gladioli: Mr. A. Fraser.

Zinnias: 1, Mr. G. Taylor; 2, Mr. Dallas.

Best and most tastefully arranged Bouquet of Flowers: 1, Mr. J. Lawrence; 2, Mr. C. Mackenzie.

Best Four Exotics, in flower: 1, Mr. J. Ross; 2, Mr. Stephen.

Heaths: Mr. A. Fraser, for Erica irbyana, acuminata, ventricosa stellata, verticellata major.

KELSO HORTICULTURAL SOCIETY, Sept. 14. The premiums were awarded as follows:

DAHLIAS: 1, Mr. D. Crichton, for Beauty of the Plain, Conqueror of the World, Rouge et Noir, Danecroft Rival, Andrew Hofer, Pickwick, Yellow Defiance, Lewisham Rival, Constancy, Bishop of Winchester, Phenomenon, Windmill Hill Rival; 2, Mr. J. Amour.

*Seedling:* 1, Mr. J. Crichton; 2, Mr. H. Tait.

*Sweepstakes for the best Twenty Dahlias:* 1, Mr. D. Crichton; 2, Mr. C. Pillans.

*Sweepstakes for the best Six Dahlias, by Amateurs:* 1, Mr. R. Laidlaw; 2, Mr. W. Hilson.

*Sweepstakes for Nurserymen, best Twenty blooms:* Mr. Lockie, Danecroft Rival, Advancer, Lee's Bloomsbury, Pamplin's Bloomsbury, Bishop of Winchester, Highgate Rival, Springfield Rival, Nicholas Nickleby, Pickwick, Egyptian Prince, Phenomenon, Oriental Pearl, Scarlet Defiance, Admirable, President of the West, Indispensable, Regina, Grande Baudine, Conservative, Lord Dudley Stuart; 2, Mr. Deans.

*Best 2 blooms of Mr. Lockie's Lady Charlotte, 3l. 3s.*, Mr. Douglas.

CALCEOLARIAS: 1, Mr. G. Cruickshanks; 2, Mr. Scott.

FUCHSIAS: 1, Mr. Deans; 2, Mr. Brunlees.

HERBACEOUS PLANTS: 1, Mr. Smith; 2, Mr. G. Cruickshanks.

CHINA ASTERS: 1, Mr. Smith; 2, Mr. Dickson.

MARIGOLDS: 1, Mr. Smith; 2, Mr. J. Amour.

PENSTEMONS: 1, Mr. Wilson; 2, Mr. Reid.

VERBENAS: 1, Mr. Smith; 2, Mr. G. Cruckshanks.

PHLOXES: 1, Mr. Wilson; 2, Mr. Smith.

LOBELIAS: 1, Mr. C. Pillans; 2, Mr. G. Cruickshanks.

SEEDLING PANSIES of 1841 and 1842: 1, Mr. Ferguson; 2, Mr. Tait.

HOLLYHOCKS: 1, Mr. G. Taylor; 2, Mr. Wilson.

NORTH OF ENGLAND DAHLIA SOCIETY, Sept. 21. The First Exhibition of Dahlias, cut Flowers, &c., was held at Mr. Dewar's Jismond Gardens, on which occasion a large pavilion, tastefully decorated with Flowers and Evergreens, had been erected on a portion of the ground. The attendance was highly respectable. The following prizes were awarded:

NURSERYMEN, 1st CLASS: DAHLIAS.

*Eighteen blooms:* 1, Mr. J. Edwards, York, for Duke of Richmond, Bang-up, Bloomsbury, Lady Harland, Scarlet Defiance, Pickwick, Andrew Hofer, Indispensable, Princess Royal, Premier, Essex Rival, Hope, Optime, Marquess of Lansdowne, St. George, Phenomenon, Sir R. Throckmorton, Mrs. Stanley; 2, Mr. H. Newton, Newcastle.

*Twelve blooms:* Mr. J. Edwards for Ploughboy, Northern Beauty, Marquess of Lansdowne, Bloomsbury, Sir R. Throckmorton, Duke of Richmond, Pickwick, Suffolk Hero, Countess of Pembroke, Catleugh's Eclipse, Princess Royal, Bedford Surprise; 2, Mr. H. Newton.

GENTLEMEN'S GARDENERS: 2d CLASS.

*Best Twelve blooms:* 1, Mr. N. W. Forster, gr. to W. Donkin, esq., for President of the West, Pickwick, Beauty of the Plain, Phenomenon, Argo, Yellow Defiance, Lee's Bloomsbury, Grande Baudine, Princess Royal, Hope, Attila, Bridesmaid; 2, Mr. J. Watson, gr. to M. Anderson, esq.; 3, Mr. J. Deans, gr. to Miss Cuthbert.

*Nine blooms:* 1, Mr. N. W. Forster, for Yellow Defiance, Indispensable, President of the West, Bloomsbury, Pickwick, Rouge et Noir, Bridesmaid, Andrew Hofer, Wheeler's Maria; 2, Mr. J. Watson; 3, Mr. J. Deans.

*Six blooms:* 1, Mr. N. W. Forster, for Conservative, Bridesmaid, Yellow Defiance, Pickwick, Metella, President of the West; 2, Mr. W. Kelly, gr. to A. Donkin, esq.; 3, Mr. J. Hall, gr. to W. Smith, esq.

*Single blooms, Best White:* 1, Mr. J. Watson, Lewisham Rival; 2, Mr. W. Kelly, do.

*Purple:* 1, Mr. J. Hall, Pickwick; 2, Mr. J. Watson, do.

*Tipped:* 1, Mr. N. W. Forster, Bridesmaid; 2, Mr. J. Deans, Phenomenon.

*Scarlet:* 1, Mr. J. Deans, Lee's Bloomsbury; 2, Mr. N. W. Forster, do.

*Lilac:* 1, Mr. H. Dewar, gr. to W. Cuthbert, esq., Imogene; 2, Mr. N. W. Forster, Fanny Waugh.

*Rose:* 1, Mr. N. W. Forster, Indispensable; 2, Mr. W. Smaile, gr. to W. J. Cookson, esq.

*Dark:* 1, Mr. N. W. Forster, Rouge et Noir; 2, Mr. J. Deans, do.

*Orange:* 1, Mr. J. Dean's Pamplin's Bloomsbury; 2, Mr. N. W. Forster, do.

*Yellow:* 1, Mr. Forster, Yellow Defiance; 2, Mr. J. Deans, Argo.

AMATEURS: 3d CLASS.

*Best Six blooms:* 1, Mr. T. Temperley, for Pickwick, President of the West, Duchess of Richmond, Yellow Defiance, Grande Baudine, Bridesmaid; 2, Mr. J. Scott; 3, Mr. T. Shotton.

*Four blooms;* 1, Mr. T. Temperley, for President of the West, Fanny Keynes, Pickwick, Hope; 2, Mr. T. Shotton; 3, Mr. J. Scott.

*Three blooms;* 1, Mr. T. Temperley, for Pickwick, Metella, President of the West; 2, Mr. J. Grant; 3, Mr. J. Routledge.

*Best Tipped:* 1, Mr. T. Temperley, Bridesmaid; 2, Mr. J. Cholcroft, Mary Jane.

*Self:* 1, Mr. Temperley, Pickwick; 2, Mr. J. Cholcroft, do.

SEEDLING CLASS: OPEN TO ALL.

*Seedlings of* 1841, *Three blooms:* 1st Class Prize to Mr. H. Dewar, for a Lilac Seedling called Imogene; 1st Class Prize to Mr. J. Edwards,

for a Seedling called Mrs. J. Richardson, colour blush white, slightly tipped with lake.

Bouquet of Cut Flowers: 1, Mr. J. Hall; 2, Mr. W. Kelly.

Bouquet of Dahlias: 1, Mr. J. Watson; 2, Mr. W. Kelly.

Balsam: Mr. J. Charlton, gr. to C. Alhusen, esq.

Cockscomb: Mr. T. Charlton, gr. to Mrs. Atkinson.

French Marygolds: Mr. T. Charlton.

Hollyhocks: Mr. C. Mills, gr. to Capt. Petts.

Pansies: Mr. J. Watson for Victory, Monstrosa, la Superbe, Dr. Johnson, Rembrandt, Queen Victoria.

Carnations: Mr. J. Scott.

Picottees: 1, Mr. W. Smaile; 2, Mr J. Scott.

North Herts and South Beds Horticultural Society. Third Exhibition, held at Hitchin, Sept. 9, 1842. The room was well filled and rendered attractive by some fine specimens of exotics, and other flowers from the gardens of Earl de Grey. The following is a list of Dahlia prizes:

*First Twenty-four:* Rev. T. G. Skinner, of Rushden—Burnham Hero, Lady Harland, Conservative, Cox's Defiance, Royal Standard, Marquess of Lansdowne, Springfield Rival, Lady Cooper, Le Grand Baudin, Widnall's Eclipse, Springfield Purple, Metella, Tournament, Henrietta, Pickwick, Dodd's Prince of Wales, Admirable, Duchess of Richmond, Nicholas Nickleby, Catleugh's Eclipse, Widnall's Queen, Phœnix, Exquisite, Highgate Rival.

*Second Twenty-four:* William Curling, esq.—Tournament, Rival Sussex, Princess Royal, Rouge et Noir, Vicar of Wakefield, Springfield Rival, Windmill Hill Rival, Argo, Le Grand Baudin, Lewisham Rival, Scarlet Eclipse, Pickwick, Unique, Nicholas Nickleby, Purple Perfection, Phenomenon, Beauty of the Plain, Grace Darling, Marchioness of Exeter, Climax, Countess of Pembroke, Duchess of Richmond, Exquisite.

*First Twelve:* Rev. T. G. Skinner—Admirable, Royal Standard, Lady Harland, Widnall's Eclipse, Defiance, Nicholas Nickleby, Le Grand Baudin, Duchess of Richmond, Dodd's Prince of Wales, Catleugh's Eclipse, Exquisite, Springfield Rival.

*Second Twelve:* J. Lucas, esq.—Metella, Le Grand Baudin, Grace Darling, Conservative, Maid of Bath, Reinzi, Wheeler's Maria, Hero of Wakefield, President, Nicholas Nickleby, Andrew Hofer, Suffolk Hero.

*First Six:* J. Lucas, esq.—Andrew Hofer, Maid of Bath, Wheeler's Maria, Le Grand Baudin, Widnall's Queen, Pickwick.

*Second Six:* J. Sharples, esq.—Rival Sussex, Charles XII., Suffolk Hero, Bontishall, Nicholas Nickleby, Pickwick.

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